

A Catalogue of Maya Era Day Inscriptions

Submitted by

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Summary

The following work is a catalogue of all known era day inscriptions existing in the Maya hieroglyphic corpus originating from Classic Period Maya (250-900 AD) sites in Mexico, Guatemala, and Honduras. It compiles those mythic texts that occurred within a single day— the inaugural date of the Maya Long Count and the establishment of a new cosmic era on 13.0.0.0.0 4 *Ajaw* 8 *Kumk'u* (August 11, 3114 BC) ¹. Although past reviews (Schele 1992; Freidel, Schele and Parker 1993;Looper 1995a; Pharo 2006; Carrasco 2010 Tedlock 2010; Van Stone 2010) of era day mythology have greatly expanded our knowledge of Maya mythic history, they do not give a complete inventory of all known passages. This project offers a full inventory of these sacred texts and scrupulously analyzes each component including the various era day events, gods and mythic locales. In addition, the work examines Maya myth from an emic perspective by evaluating the different genres of mythology found within Maya literature with the purpose of clarifying how myth acted as a living force within society. It includes a transliteration, transcription and translation of each passage followed by a commentary that explores each text's mythic, historic, architectural and religious associations. Once compiled, the work attempts to organize these passages within a hypothetical narrative and produce a tentative reconstruction of the basic era day story. At the very least, this study seeks to provide an organized body of data for future researchers interested in the topic of Maya cosmology.

¹ The Gregorian date is reckoned by the GMT correlation (584283).

Statement of Authorship

Except where reference is made in the text of the thesis, this thesis contains no material published elsewhere or extracted in whole or in part from a thesis submitted for the award of any other degree or diploma.

No other person's work has been used without due acknowledgment in the main text of the thesis.

This thesis has not been submitted for the award of any degree or diploma in any other tertiary institution.

Carl D. Callaway

15/10/2011

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Geelong, Australia 12.19.19.10.2 2 *Ik' 5 Xul*

List of Abbreviations and Acronyms

The following abbreviations will be used throughout this work:

EG	Emblem Glyph
G	Lord of the Night
GMT	Goodman Goodman, Martínez and Thompson Correlation
H.S.	Hieroglyphic Stairway
ISIG	Initial Series Introductory Glyph
intr.	Intransitive Verb
JGU	“Jaguar God of the Underworld”
Kerr Vessel	K
Mon.	Monument
p.c.	Personal Communication
pos.	Positional Verb
PSS	Primary Standard Sequence
T	Thompson Catalogue Number
tr.	Transitive Verb
w.c.	Written Communication
*	Reconstructed Value or Number

CMHI-Corpus of Maya Hieroglyphic Inscriptions

FAMSI- Foundation for the Advancement of Mesoamerican Studies Inc.

LACMA- Los Angeles County Museum of Art

Harvard VIA- Harvard Visual Information Access

INAH- Instituto Nacional de Antropología e Historia

PMAA- Pennsylvania Museum of Archaeology and Anthropology

Foreword

The following study takes a systematic look at all known era day inscriptions existing in the Maya hieroglyphic record. Specifically, the study catalogues and analyses those gods, events and sacred locales that transpired during a single day in the deep primordial past—the inaugural date of the Maya Long Count that took place on 13.0.0.0.0 4 *Ajaw* 8 *Kumk'u* (August 11, 3114 BC)². Past overviews of era day inscriptions (Schele 1992; Freidel, Schele and Parker 1993;Looper 1995a; Pharo 2006; Carrasco 2010; Tedlock 2010; Van Stone 2010) have not considered all era day texts and subsequently there exists no comprehensive review of the day's gods, actions and sacred place names. Era day texts remain for the most part, a jumbled bag of mythic stories with a confusing array of events, gods and place names. This project will offer a systematic inventory and examination of these mythographies (collection of myths) and scrupulously analyze each component.

Chapter I of the work gives a brief definition of era day and its relationship to Maya Calendar and mythic history. It clarifies the term “era day” and brings it into the proper perspective by distinguishing it from other confusing nomenclature. Chapter I also provides a brief survey of the literature and research related to era day studies. It begins in the 1880's with those early scholars who mathematically sought out the inauguration date of the Maya Long Count and it ends with a description of the recent publications and related decipherments on the topic of era day.

Chapter II explores the general role that myth plays in traditional cultures and it attempts to understand what a myth actually is (in the western sense) and contrasts this definition against Maya conceptions of myth. An etic definition of myth will be derived from studies in anthropology, modern folklore and mythology. This definition of myth will then be compared with an emic Maya perspective. As a result, the chapter explores the general role that mythology plays within traditional societies and defines how myth distinguishes itself from other narrative genres like legend, folktale and fable. A main goal of Chapter II is to understand how Maya scribes delineated between myth and history (if at all) and the different types of narrative genres that myth inhabited within Maya writing. In doing so, it illustrates how myth acted as a real “cultural force” (Malinowski 1926:13) within the every day life of the ancient Maya. Finally, a broader

² The Gregorian date is reckoned by the GMT correlation (584283).

definition of myth is sought and will be explained within the context of the greater collective “cultural memory” (Assman 2006:1-2) of society.

Chapter III presents a survey of era day passages and will include a transliteration, transcription, and translation of each passage followed by a commentary that explores a multitude of ideas contained within each respective text. Additionally, this section will show that these inscriptions occur on many different types of media (e.g. inscribed stone, bone and painted pottery) ranging from the Early Classic to Post Classic Period and from all corners of the ancient Maya world.

Chapter IV offers an in-depth comparative analysis of two more era day passages from the Vase of the Seven Gods (K2796) and the Vase of the Eleven Gods (K7750). These two vases display paintings that are veritable “snapshots” of an era day event that transpired in the underworld court of God L. Prior research (Coe 1973:106-109; Schele 1992:126-127; Freidel et al. 1993:67-69; Zender and Guenter 2003; Van Stone 2010:36-38; Tedlock 2010:34-42) on these vases has not compared the two in any great detail. The vases are identical in much of their imagery and text yet they differ in some very important ways. The examination these differences in epigraphy and iconography reveal insights into who owned the vessels, their probable place of origin, and how the mythic episode portrayed relates to the historical rites and political history of their owners.

The aim of Chapter V is to offer a hypothetical reconstruction of the basic era day story from the corpus of known passages. First, it discusses the narrative structure of mythic texts and how they are similar in form to historical texts. It argues that these mythographies are part of a shared narrative that can be sequenced along an event line that parallels the sun’s daily east-west trek across the sky. Four hypothetical reconstructions of the era day story are offered. The first three versions consolidate texts based on the historical time frame when they originated (Early Classic, Classic, and Post Classic). The fourth reconstruction is a full composite of all texts from all periods. These reconstructions at the very least, highlight commonalities and differences inherent in each version, and allow the investigator to better comprehend the conceptual themes underscoring the era day story as it permutates across time and place.

The concluding Chapter VI will offer a basic summary of new findings presented in this study. It also ponders new insights pertaining to the Late Classic uniformity of era day texts. It explores how facets of Maya ritual are reflections of the era day story, especially how the cosmic order became the societal order by which the Maya organized their world.

The appendices of this work are of special importance. Each appendix catalogues the various components comprising era day passages. Appendix I lists of all the era day monuments cited in the work. Appendix II offers a list and short commentary on all era day events. Appendix III describes the various Gods involved in the era day story. Appendix IV specifies and comments on the sacred locations where era day events transpired. Appendix V offers an in-depth analysis of the *k'ojob* term that is the object of the most widely quoted era day event: the changing of the altar/pedestal. Appendix VI tentatively proposes names for the higher periods of the Long Count beyond a *bak'tun* cycle. These higher periods record some of the largest time spans ever conceived by any world culture. Finally Appendix VII explores era day passages in the context of Period Ending celebrations. Specifically, it discusses how era day passages are related directly or indirectly to *k'atun* celebrations within the Maya calendar, and how such a temporal pattern is helpful in assigning probable historical dates to undated monuments displaying mythic texts.

This study is but one small glimpse into the rich and varied cosmos of Maya mythology. I hope this dissertation is as rewarding to read as it was to research. It is my sincere wish that a thorough, systematic study and critical analysis of the primary inscriptions concerning era day will, at the very least, provide an organized body of data that will be useful for future researchers interested in the topic of Maya mythology and cosmology.

Chapter I

Introduction and Previous Research

I.1 Introduction

The aim of Chapter I is first to offer a brief definition of the era date and clarify the term by distinguishing it from other confusing nomenclature. The latter part of Chapter I will provide a survey on the past literature and research related to era day studies. It begins in the 1880s with those early scholars who mathematically sought out the inaugural date of the Maya Long Count and it ends with a description of the most prevalent publications and related decipherments concerning era day mythology.

I.2 The Many Facets of Era Day

Era day served not only as the “start date” for the Maya calendar but it embodied various perceptions and functions within Maya calendar keeping and myth. The date served as the starting point for the Long Count that tracked vast stretches of accumulated days. It is a set point in time in the distant past interpreted as August 11, 3114 BC, when the cycle of 13 *bak'tuns* ended and the Long Count began its daily march forward increasing in days, months, and years toward historical time³. The inaugural Long Count and day name are written in modern notation as 13.0.0.0.0 4 *Ajaw* 8 *Kumk'u*. The day consists of a two-part name with the first part (4 *Ajaw*) recording the position of the day within the 260 day *tzolk'in* ritual calendar whose count is derived from combination of thirteen numbers with twenty day names (13 x 20 = 260). The second part of the date (8 *Kumk'u*) records the position within a 365 *haab* solar year and its count consists of eighteen months of twenty days each followed by a five day period (18 x 20 plus 5 = 365). Both the ritual and solar calendars intermeshed to form an even larger count of 18,980 days (called by modern scholars the “Calendar Round”) in which the same two-fold name combination of 4 *Ajaw* with 8 *Kumk'u* repeats after 52 years have elapsed. With the Long Count, ritual, solar and Calendar Round all interlocking, the position of the day within any one of calendars can be calculated with a mathematical precision.

³ I currently favor the 584,283 GMT correlation for many reasons, not the least of which is its accuracy in predicting a recorded solar eclipse on Santa Elena/Poco Winik Stela 3 (as first pointed out to me by Peter Mathews). A reexamination of Stela 3 by Peter Mathews, Barbara MacLeod, Michael Grofe, Hutch Kinsman and the author in 2012 did indeed verify that on 9.17.19.13.16 5 *Kib* 14 *Ch'en* a solar eclipse did occur over the site.

On an astronomical level the day name 4 *Ajaw* 8 *Kumk'u* corresponds to a basic unit of time called *k'in* meaning “day” or “sun” (Thompson 1971:142). The 365 day calendar charts the sun’s daily progression over the course of the solar year. At the same time, it served as the reference point from which other celestial and planetary cycles could be benchmarked and measured from. For this reason the day served as the base date for many astronomical almanacs in the *Dresden Codex* (e.g. the Venus, “Mars”, lunar eclipse and Serpent Number tables) as well as ritual cycles in the monumental inscriptions (e.g. the 819 Day Count and the Lords of the Night).

On a divinatory level the day communicated godly portents and mandated what type of offering to what god was necessary. The 260 day ritual calendar especially was a main divining tool for godly communication (Thompson 1971:66-103). Similar calendar divinations are still practiced today within the modern Maya communities from highland Guatemala (Barbara Tedlock 1978; 1982).

On a mythical level the day served to record a host of godly activities that gave order to the cosmos and the day was universally recognized as a date of cosmogenic relevance. At present, there are over fifteen godly actions (see Appendix II of this study) that manifested on the first day of the new era. The Maya revered the numbers comprising the numerical coefficients (4 and 8) of the day name as living gods (Thompson 1971:12). These deities, hoisted and carried the day and month cycles into place as if time were “commodities borne by merchant travelers” (Aveni 2009:68). Nowhere is this better illustrated than on Copan’s Stela D (Figure II.5) where the coefficients are depicted as fully personified gods that carry Long Count cycles and day names via tumplines strapped across their foreheads. In the case of 4 *Ajaw* 8 *Kumk'u*, the number four is the Sun God while the number eight is the Maize God— two deities recorded as participating in pre-era day and era day activities (see Appendix III).

Era day by its very nature is an “artificial construct” (Stuart 2011a:171) since the date was most likely calculated in retrospect as scribes needed to track more and more vast sums of days beyond the 52 year Calendar Round cycle. Interestingly, they chose a point in time that did not correspond with the expected internal logic of the calendar (a closure of twenty *bak'tuns*) but instead chose the closure of thirteen *bak'tuns* to “reboot” the Long Count. It is as if the vigesimal count marched across time infinitely recording the sum of days when suddenly a “snag” occurred necessitating a “shut down and reboot” of all cycles. What prompted the revised count? Was it a mythic, historic or astronomical event? It is generally accepted that the era base date was set many centuries or even

millennia after the invention of the Calendar Round since the era date falls in the year 3114 BC— a time that presages Maya civilization by two and a half thousand years (Stuart 2011:171). The earliest recorded Long Counts fall within the 7th *bak'tun* and are found not at Maya sites but at Late Olmec sites like at Chiapa de Corzo (Stela 2, with a Long Count of [7.16.]3.2.13) and at Tres Zapotes (Stela C, with a Long Count of 7.16.6.16.18) (Coe 1999:62). Therefore, the “Maya” calendar was well established by the first century BC by non-Maya scribes who were heavily influenced by the Olmec (Coe 1999:62) Whatever the case, it seems likely that scribes chose the day intentionally not only for its mythic significance but for its divinatory, mathematical and astronomical correspondences as well.

1.3 Era Day Aliases: A Note on Era Day Terminology

Before discussing further the discovery of the era date and its permutations through the academic literature, the term “era day” must be clearly addressed since the name within Maya research has taken on many aliases in the past. Each new label infers a different set of ideas and values that may or may not be relevant to the current discussion. This plethora of names include:

- “zero mark” (Seler 1904:26)
- “the historical starting point” (Förstemann 1904:115)
- “point of departure” and “zero point” (Förstemann 1904:399)
- “beginning of Maya chronology” (Förstemann 1906:119)
- “era day” (Spinden 1969:33; Berlin 1977:51-52)
- “zero date” (Thompson 1971:149)
- “date on which the world was created” (Thompson 1971:149)
- “starting point of Maya chronology” (Morley 1975:111 and 267)
- “first day of creation” (Schele 1992:122)
- “creation day” (Freidel et al. 1993:62)
- “the beginning of Maya time” (Stuart 1995:168)
- “start date”, “day zero” (Aveni 2009:80-83)
- “creation day” (Stuart 2011a:169)
- “creation base date” (Stuart 2011a:171).

The name “creation day” especially, gets passed around quite liberally in academic circles— the term “creation” implies that there must be some generative act tied to the

day. The question naturally arises as to what significance did the ancient Maya attribute to the day. Did they see it as embodying the end of a major cycle and the start of a new count, or did it relate to some cosmogonic act from which the present world grew?

The current work will employ the more neutral term of “era day” used by Herbert Spinden (1969:33) and Heinrich Berlin (1977:51-52) to name the Long Count position corresponding to 13.0.0.0.0 4 *Ajaw* 8 *Kumk’u*⁴. The term “era” is based on the observation that Maya scribes viewed the day as marking the end of a major epoch (although the time span of what numerically constitutes a full era is still an open question). Support that the era day designation embodies the completion of a time cycle comes from the verb *tzutz* meaning “to finish” which so often describes the summation of 13 *pik* cycles of the Long Count in connection with the era date. Even more conclusive is how scribes mathematically benchmarked their historical calculations and those of astronomical cycles (e.g. Venus and Lunar cycles in the *Dresden Codex*) to the era date. This mathematical anchoring demonstrates the great importance that era day had as a major reference point in time for stories of history, myth and astronomy.

I.4 Discovering the Era Date

Investigations of the era base date began with early 19th century scholars who first sought to understand Maya arithmetic and the complex inner workings of the ancient Maya calendar— its sequence of days within the cyclic calendars of 260 and 365 days, and the cycles of days contained within a more linear calendar of the Long Count. As we shall see, it soon became apparent from a study of calendar mathematics that the Long Count began from a fixed starting point in the remote past similar to the modern Julian Day Numbering system. Calculations determined with a mathematical certainty that the Long Count base date corresponded to the day name 4 *Ajaw* 8 *Kumk’u* and that the Maya chronologies found on monuments and in the codices, proceeded from the same referential point.

⁴ The terms era base date and inaugural date of the Long Count will also be used throughout the current work.

I.5 Early Scholarship

The rediscovery of the base date was claimed by two early Maya scholars: J.T. Goodman and Ernst Förstemann. But as we shall see, it was Förstemann who must be given proper credit for discovery of the inaugural date. Initially, Goodman surveyed the calendar data largely from the stone monuments and the corpus of inscriptions gathered by A.P. Maudslay while Förstemann analyzed the dates and inscriptions in the *Dresden Codex*, one of the few surviving handbooks of a Maya priest.

In the commentary *The Archaic Maya Inscriptions* appearing in February of 1897 in the Volume VI Appendix of A. P. Maudslay's great work *Biología Central Americana*, Goodman (1897:10) described how he labored for well over seven years to reconstruct the values of the Maya Long Count from numerical signs (the "bar and dot" and "head variants" of numbers) of the stone inscriptions and from calendar and mathematical data gleaned from the writings of Diego de Landa and Pío Pérez. He states quite emphatically that:

I ascertained the first cycle [the *bak'tun*] was composed of twenty katuns . . . I finally deduced a chronological calendar . . . and after reversing the process, succeeded in restructuring the outline of the entire Archaic chronological scheme . . . (Goodman 1897:13).

Yet curiously on page 93 of his 1897 work, he offers an example of the 4 *Ajaw* 8 *Kumk'u* era date reckoning *not* from the stone inscriptions to which he was intimately familiar but from page 51 and 52 of the *Dresden Codex* Lunar Tables! This leads one to suspect that Goodman was aware of Förstemann's previous 1887 deductions from the *Dresden Codex* concerning the era date and had knowledge of the German scholar's early discoveries (Thompson 1971:30). Goodman's tables do indeed provide the era day base date in conjunction with their Long Counts. About the era date on page 51 of the *Dresden Codex*, Goodman (1897:93) states that the 4 *Ajaw* 8 *Kumk'u* date is "the beginning of the 54th great cycle of the Archaic era." What does he mean by the 54th great cycle? At the time, Goodman (1897:25) believed that the Initial Series Introductory Glyph (ISIG) represented various Great Cycles where one "Great Cycle" equaled 13 *bak'tuns*. These "Great Cycles" in turn produced an even larger "Grand Era" that was comprised of 73 "Great Cycles." At the end of the "Grand Era" the day name and month repeat the same calendar

positions⁵. In Goodman's view the era date was but one of many probable starting points and one that corresponded with the current cycle of 1-13 *bak'tuns*. Goodman did not offer a straightforward mathematical explanation of how he arrived at the era date. The calculations are inferred from his Long Count charts representing the "54th Great Cycle." The charts note the "54th Cycle" begins with the date 4 *Ajaw* 8 *Kumk'u*. Already, Goodman (1897:127, 135) anticipates the idea that the era date and the Great Cycles are related to some great time station by which the calendar returns to a start date and is renewed. Goodman could have reckoned the era date from Maudslay's drawings of Quirigua Stela C and Palenque's Temple of the Cross Sanctuary Panel, both of which record the era date and were verifiable against his Long Count charts and calculations.

In the later part of the 1880s, E. Förstemann (1904:403) in his examination of the *Dresden Codex*, reckoned the era date for the Long Count since it served as a base date for the Venus Table calculations as well as several other almanacs. Förstemann saw the zero date being employed for a start date on page 24, 51, 60, 62, 63, and 69 of the *Dresden Codex* (Förstemann 1906:115, 197, 222, 224, 234). By 1887 in *Zur Entzifferung der Mayahandschrift*, Förstemann announced that the Long Count was indeed reckoned from a 4 *Ajaw* 8 *Kumk'u* base date and was able to explain the rational of "Ring Numbers" or numbers that were used to count backward from the era date. In his essay "Aids To Deciphering Maya Manuscripts", Förstemann restates his earlier discovery:

A perfectly exact computation was attained only by deciding on some fixed day (the creation of the world, perhaps, or the birth of a principal god) as a point of departure, and by counting the days from zero point . . . this important day is a 4 *Ahau* 8 *Cumku* (Förstemann 1904:399).

Here, Förstemann attaches more than a mathematical importance to the era base date and delves into the possible mythic significance of the day. He conjectures that the date could signify a greater meaning and relate to some cosmogonic or theogenic act of creation. It would be nearly seventy years until such speculation was visually verified with the discovery of the Vase of the Seven Gods (Coe 1973:106-109). It was Förstemann then, who was also first to speculate on the mythic significance of the base date.

⁵Spinden (1969:36) sums Goodman's argument for a "Grand Era" as follows: "Goodman sees a neater finish to the chronological problem in a round of 73 times 13 baktuns, which would bring not only the day but the month position back again as a terminal date of a great cycle. He argues that the great wheel of time began from a great cycle of 73 ending on a day 4 *Ahau* 13 *Yax* and that the great cycle of the era recorded in the inscriptions was really the 54th in order from this far off beginning."

Eduard Seler (1904:26) in his paper “The Mexican Chronology” also gives credit to his German colleague for the discovery by noting that:

In a paper presented before the International Americanists Congress in at Berlin E. Förstemann, to whom we owe so many discoveries, especially in regard to the mathematics in the Dresden manuscript, furnished proof that . . . the day 4 Ahau (4XX), the eighth of the month Cumku (the last of the eighteen festivals), is to be regarded as zero mark (Seler 1904:26).

As to Goodman’s claim of discovery of the era base, the current researcher has not found any written rebuttal by Förstemann noting his opinion on the matter. However, it is clear the German scholar thought lowly of the American’s contributions to field by sourly noting elsewhere:

In his work “The Archaic Maya Inscriptions”, 1897, which on the whole, contains more imagination than of science . . . (Förstemann 1906:233)

Thompson (1971:300) finally weighed in on the question of discovery with the evidence against Goodman’s claims:

Irrefutable evidence, however, that Goodman had read Förstemann comes from his own pen. In discussing the chronological calendar, Goodman writes, “It has been known that the Mayas reckoned time by ahaus (e.g. tuns), katuns, cycles (e.g. baktuns), and great cycles (e.g. pictuns).” That information is in that none of the early sources, but was brought to light only through the studies of Förstemann. Furthermore, Brinton (1895) gives many details of Förstemann’s researches, including the reading of IS [Initial Series], and such matters as the glyphs for the katun and tun, in his *Primer of Maya hieroglyphics*, which surely must have come into Goodman's hands.

Ultimately the field of Maya studies benefited from both Förstemann’s and Goodman’s early decipherments and calendar calculations, that in the end, proved that the mathematics of inscriptions and the codices were based on the same logic and their Long Count calendars were indeed reckoned from the same base date.

I.6 Alternate Era Dates

Goodman’s idea that the era date was not absolute but one of several probable starting points has held traction over the years, in discussions concerning very large dates that calculate into the deep past beyond the era date, and those that broadcast into the

distant future time. Even Morley was aware that scribes possibly counted some dates from a previous era noting that some Initial Series dates (bearing a *bak'tun* coefficient of 12) are counted from 13.0.0.0.0 4 *Ajaw* 8 *Sotz'*, or from the previous era 13 *bak'tun* cycle (Morley 1975:107-114).

Over the years there have been numerous challenges that the 13.0.0.0.0 4 *Ajaw* 8 *Kumk'u* era base did not in fact serve as the base date of the Long Count. A few of these challenges are worth mentioning. Hermann Beyer (1936) in a paper titled “The True Zero date of the Maya” used an arithmetic approach to challenge conventional scholarship on era base calculations. He too conjectured about a possible alternative inaugural date for the Maya calendar. Based on evidence from Tikal Stela 10 (where 1.11.19 precede 9 *bak'tuns* in the recording of the Long Count), he proposed that the 13.0.0.0.0 4 *Ajaw* 8 *Kumk'u* base was not the absolute zero date. It was rather only the starting point of a lesser era. Using the Tikal Stela 10 date to count back from the era date:

[1.11.19].0.0.0.0.0 4 *Ajaw* 8 *Kumk'u*

-1.11.19.0.0.0.0

19.19.18.8.1.0.0.0.0 5 *Ajaw* 8 *Yaxk'in*

or as Beyer imagined a Long Count where all cycles “zeroed” out

*0.0.0.0.0.0.0. 5 *Ajaw* 8 *Yaxk'in* or the true "zero date" of the Maya.

The 5 *Ajaw* 8 *Yaxk'in* date then becomes an alternative starting point of the Long Count. Beyer’s hypothesis is a return to the J.T. Goodmann idea that the era date was but one of many probable starting points.

Still others would propose an even more contemporary base date for the inaugural day based solar reckoning. Thompson (1932) working with J. E. Teeple proposed in their “Determinant Theory” that it was possible that Maya scribes could have begun the Long Count on the start date 7.6.0.0.0 11 *Ajaw* 8 *Kumk'u*, a date that shared the same exact solar position in the year as the remote era base date 13.0.0.0.0⁶. The Thompson and Teeple premise prompted Linton Satterthwaite (1961) to propose an inaugural date of 8.6.1.9.0 4 *Ajaw* 8 *Kumk'u*. Edmonson (1988:116) too suggested an “Olmec Calendar” base date of 6.4.13.9.16 4 *Kib* 4 *Yaxk'in*. Most recently, Prudence Rice (2007), like Thompson (1932), chose the 7.6.0.0.0 Long Count as a start date and suggests that its formulation was due to more cultural a political reasons and incorporated a synchronized

⁶ Michael Grofe (p.c. 2012) contends that 7.6.0.0.0. is not the exact solar position but is in fact in error 33 days.

cycle of 256 years called a *may* cycle of 13 *k'atuns* (as first suggested by Edmonson 1988:70). Despite these various alternative proposals, the Classic inscriptions prove by sheer statistical weight that, with the exception of a few rare cases, the majority of Maya Long Counts count from the base date 13.0.0.0.0 4 *Ajaw* 8 *Kumk'u*.

1.7 The Correlation Question and Astronomy

Interest in a possible astronomical basis for the era base date was born when J.T. Goodman (1905) proposed his correlation solution. Goodman offered a correlation constant (to be added to a Maya Long Count) of 584,283 days to fix the date at August 11th 3114 BC⁷. The correlation constant was later slightly amended by Juan Martínez Hernández (1926) with an adjusted value of 584,284 days fixing it to the August 12 date. Later Thompson (1927) refined the correlation to 584,285 days fixing it to 13th August, 3114 BC. In recognition of these past scholars Thompson named this new “family” of correlations the Goodman, Martínez and Thompson Correlation or GMT Correlation. Thompson (1935) adjusted the GMT to a correlation constant of 584283 (with an era day falling on 11th August 3114 BC) in recognition that the 260-day cycle was still used in Highland Guatemala; by employing the 584283 correlation it would show greater continuity with its Classic Period calendar calculations. Floyd Lounsbury (1992) from his study of the Venus and Eclipse Tables of the *Dresden Codex*, demonstrated that 584,285 correlation is also worthy of consideration. The GMT has won widespread accord with most scholars of today. Radiocarbon dating of Tikal wooden lintels (Satterthwaite and Ralph 1960) have seemingly validated the accuracy of the GMT. Notwithstanding, there have been and will continue to be a host of challenges to the GMT correlation based on chemical, archaeological and astronomical evidence⁸. One of the most recent dissidents is Aldana (2011) who offers evidence that the GMT may be off by a factor of more than sixty days and is based on doubts over the ethnographic data and assumptions the GMT is based on.

With the New and Old World calendars now synchronized, scholars began to speculate to the astronomical nature of the Maya era date and in doing so pondered the question: Did Maya scribes intentionally back-calculate to the era base date to target a

⁷ See Aveni (1980:204-10) for an explanation of the correlation constant; basically the correlation constant is used to convert a Maya Long Count date to a European calendar date and it is a number of days that are added to another number representative of a Long Count date to arrive at a Julian date.

⁸ See Kelley (1983:30-33) for a summary of correlation challenges.

specific astronomic phenomena? Many have argued that the sun's zenith passage served as a determinant to fixing the base date. Merrill (1945) put forth his "zenith hypothesis" noting the proximity of the era date with the solar zenith on August 14th (at a latitude of 15 ° N)⁹. The date is one of two yearly dates when the sun travels directly overhead. Independently of Merrill, Malmström (1973;1978) noted that the August 11-13th date era date was very close solar zenith at the southern Maya latitudes of 14.8° N, the same latitude as Copan, where sun reaches the Zenith twice a year at intervals of 105 and 260 days (adding up to 365 days). Malmström posited that the city of Copan may occupy its location due to its ability to observe zenithal sun positions, yet the author acknowledges that it is clear from the archaeology that the city itself postdates the establishment of era date in the year 3114 BC. As previously discussed, the year of the era base precedes any known Maya settlement and in fact harkens back to the age of the Olmec civilization.

The GMT Correlation has fueled much hypothetical fire, leading astronomers to inquire what the night sky looked like on era day from Maya latitudes. The advent of computers and desktop computing by the 1980's made rendering of star maps for any locale a relative easy task and astronomers were now able to track planets and factor in the movement of the background stars due to precession¹⁰. Smiley and Robinson noted that:

One of the most interesting facts to be noted from the [era day star] map is the proximity of Procyon, Antares and the Pleiades to the celestial equator. As a matter of fact if one assumes that the zero date of the Mayan Calendar was chosen as the time when Procyon was precisely on the celestial equator, that is when it rose and set in two exactly opposite directions, one can work backward and find a period of precession, 25, 522 years (Smiley and Robinson 1985:3).

Hypothetically speaking, if one were to track the slow but steady shift of stars along the celestial equator (of Procyon, Antares and the Pleiades), especially at times of Zenith (or

⁹ Concerning those who noted the significance of the zenith passage, Grofe (2011b) states "The importance of the solar zenith passage in Mesoamerica and its relationship to the 260-day calendar and the calculation of the tropical year were first noted by Zelia Nuttall (1928), Ola Apenes (1936), and Rafael Girard (1948). Robert Merrill (1945) and Vincent Malmström (1973, 1978, 1997) independently proposed that the zenith passage at 14.8° N latitude corresponds to the Era Base in the Long Count. Measurements of the zenith passage in Mesoamerica are discussed by Franz Tichy (1981), Anthony Aveni and Horst Hartung (1981), Clemency Coggins (1982), and Johanna Broda (2000; 2006)."

¹⁰ As Milbrath (1999:310) states: precession is the "slow conical motion of the earth's axis of rotation about the poles of the ecliptic, resulting in a motion of the celestial poles among the stars in a cycle of approximately 26,000 years." Precession causes the stars of the night sky to slowly drift from their "fixed" points in space. From the viewer's standpoint this shift is about 1 degree every 72 years. Precession also causes a movement of the solar equinoxes along the ecliptic.

the solar drift of the equinoxes against the background stars), one could track precession (Grofe 2007:92). Only a few sky watching cultures of the ancient world like the Greeks and Chinese (Aveni 2009:100) were able to estimate precessional drift. As Aveni (2009:87) states the given the Maya's "unparalleled devotion to skywatching and mathematical computation" the question of precession is one worthy of looking into. The accuracy of Maya scribal calculations (such as those in the *Dresden Venus Tables*) infer strongly that the Maya could have detected precessional drift of the background stars since the average star shift is approximately 0.5 degrees per century, about the size of a full moon (Aveni 2009:102-03). As far as the evidence for precession in the epigraphic record, Michael Grofe (2007) has recently argued that processional drift is evident within the Serpent Number Series in the *Dresden Codex*, a claim that has been critically reviewed by Aveni 2009 (104-106) and later successfully rebutted by Grofe (2011b). Meanwhile Barbara MacLeod (2008) and Grofe (2003) have shown evidence for a "3-11 *Pik* Almanac" comprising a cycle of 71.18 years (equaling approximately one degree of precession) that could have been used to track the precessional drift of background stars. The answer to the question of precession is well beyond the scope of the present work, but it serves as yet another possible avenue to explore and to understand the possible rationale behind the back-calculation of the era base date by the tracking of stars, especially those that lay along the celestial equator on the inaugural day of the Long Count in 3114 BC. To these ideas and all future speculations Thompson wrote:

The date of the inauguration of the Long Count, and the reasons which led to the choice of the starting point have given rise to much speculation. In the absence of any authentic facts on that distant matter, one must regard the subject as ideal for the exercise of that joyous pastime, the building of theoretical castles in the sand (Thompson 1971:150).

Thompson (1971:52) further noted that the correlation of the era base with the solar zenith date was merely a "pitfall of coincidence" and that he believed that Maya astronomers did not have accuracy to compute the solar year beyond 365.24 days. Evidence to the contrary arose early with John Teeple (1931:70–74) who concluded in an analysis of Copan Stela A dates, that scribes calculated a tropical year of 365.2419355 days. More recently, Grofe (2011a:216-217) states that the scribes could have calculated

the solar year to an accuracy of 365.2422 days¹¹. Barbara MacLeod (in Grofe 2011a:217; MacLeod and Van Stone 2011:5) mentions that at Quirigua the Classic Maya had a precise value of 365.2422 days for the tropical year as calculated in a deep-time count contained within a gigantic Distance Number of over 90 million years. Exciting as these calculations are, more data involving deep time calculations is needed to verify the broad use of such a tropical year calculations over the Maya world since such precise calculations could be the work of a local scribe.

The zenith hypothesis and the accurate estimation of the tropical year have relevance to the current study. If true, it anticipates the idea that ancient Maya scribes were aware of a connection between the era base date and the solar zenith and that that they may have intentionally back-calculated to the era date to correspond to a zenith sun passage. Another possibility is that scribes may have incorporated aspects of the zenith event (e.g. the role of the solar god) into their cosmology, art and iconography connected to era day activities. These possibilities and their implications will be further studied in Chapter III of the current study, especially concerning Chichen Itza's Caracol Panel 1.

I.8 Deciphering Era Day Cosmology

What is lacking from all the early interpretations is the decipherment of mythic passages that accompanied the date. Until the 1950's, it was the general consensus that aside from the dates, the inscriptions were largely inscrutable and any attempt to decipher them was met with great criticism (Thompson 1971:311). It was not until the works by Yuri Knorosov (1952) revealed the syllabic nature of the script (allowing for the decipherment of basic words and phrases) and Tatiana Proskouriakoff's (1960; 1963-1964) proofs of the script's historicity, that attempts could be made to decipher the mythic history connected to the era day. In addition, in the 1950s only a handful of era day passages were known (e.g. from Chichen Itza, Copan, Coba, Palenque, Quirigua, and

¹¹ As Grofe (2011b:217) explains: "After analyzing dates on Copan Stela A using his 'determinant theory' Teeple (1931:70-74) concluded that the Copan astronomers had calculated a tropical year of 365.2419355 days, slightly more accurate than the Gregorian year of 365.2425 days. Interestingly, Teeple's Copan tropical year provides an easily measurable whole multiple of 22,645 days = 62 years, which requires skipping a leap-year every 124 years. Within several deep time intervals from the Serpent Series in the Dresden Codex, I found Teeple's value for the Copan tropical year to be highly productive, particularly with the placement of the base date 9 *K'an* 12 *K'ayab* on a precise summer solstice over 30,000 years prior to the Long Count Era base in 3114 BC (Grofe 2007:74-85). The productivity of such constant values in different places and times suggests some historical continuity, and it provides us with the possibility of testing."

“Tila”) and their meaning remained undiscussed by those few scholars who were daring to crack the Maya code.

By the late 1960s and early 1970s small advances started to pull back the epigraphic veil behind which era day inscriptions hid for so long. Heinrich Berlin (1963) and David Kelley (1965) uncovered the identities of the Patron Gods of Palenque. In a number of articles, Floyd Lounsbury (1976, 1980, 1985) established the chronological framework of the Palenque gods, charting their various births and accessions, in relation to the era date. In 1973 Michael Coe introduced the Vase of the Seven Gods, giving the first in-depth analysis of an era day text and iconography (Coe 1973:106-109). This vase manifested a complex array of god’s with an accompanying era day text.

Even so, for the most part, the mythology of era day and its associated texts took a back-seat to the exciting developments occurring in the decoding and charting of Classic Maya history. With the decipherment of names of the kings and queens, soon came the understanding of their royal deeds, rituals and memorials. Little by little, scholars also kept making inroads into the decipherment of the names and deeds of gods. It was coming increasingly clear that the rites of kingship were closely allied with the actions of gods in primordial time. By the late 1980s and early 1990s Maya decipherment reached the level of understanding where Classic dynasties and their deeds and political interactions could be mapped, and attention refocused on understanding the complex mythic history and how historical kings continually sought to source their power and legitimacy of rule in the lives and actions of the gods.

The decade of the 1990s was truly a watershed period for new insights into era day mythology on all levels. Several significant decipherments led to a greater understanding of gods, their actions and sacred place names. Barbara MacLeod (in Schele 1992:232-238) in a letter to Nikolai Grube explained her new reading for the so-called “cross-planks” logograph (T153) that served as a primary event on so many era day texts. MacLeod’s approach was grounded in sound epigraphic and grammatical reasoning. She systematically reviewed all occurrences of the T153 verb in the Maya corpus and found a substitution pattern at Chichen Itza where the T153 logograph replaced the spelling **ha-l(i)**, leading to a phonetic reading of *hal*. She then reviewed meanings of the term throughout various branches of Maya languages in Colonial and contemporary Maya dictionaries; this path eventually led to a tentative translation “to make manifest” and in some cases “to change” (MacLeod in Schele 1992:237-238; Freidel et al. 1993:416). MacLeod would later refine her T153 reading to *jel* for “change” and the object of this

change was the *k'ob* or “hearth” (Freidel and MacLeod 2000). MacLeod also distributed a seminal note titled “Genesis: The First Steps” (MacLeod 1991) where she demonstrated the parallels between the Classic Maya era texts and the creation passages from Colonial Period documents like *The Book of Chilam Balam of Chumayel* and the *Popol Vuh*, ultimately showing how the hieroglyphic texts concerning the establishment of three stone altars (stated on Quirigua Stela C) very likely served as the antecedent to later Colonial Period texts.

By early 1990s Linda Schele, David Freidel and Joy Parker presented the first real systematic review of Maya cosmology as it pertained to hieroglyphic texts and the associated era day passages. The inscriptions at Palenque, Quirigua and the *Dresden Codex* were especially highlighted (Schele 1992; Freidel et al. 1993). Previous scholars had already laid much of the groundwork for their study. A host of small details and insights into the gods, god iconography, sacred landscapes and the grammatical and rhetorical structure of mythic texts were intensively explored through a decade of *Mesa Redonda de Palenque* meetings (Greene Robertson 1974a; 1980; Robertson and Jeffers 1978; Benson 1985). Karl Taube among many others made key advances in understanding the “who’s who” of Maya Gods and their role, status, and function within Maya society. With his study *The Major Gods of Yucatan* (1992), Taube inventoried the various Maya deities in the *Dresden Codex* (building on the previous works of Schellhas 1910 and Thompson 1970) while intensively outlining their diagnostic traits and tracing these gods to their Classic prototypes. Stuart and Houston’s (1994) work *Classic Maya Place Names* was vital in identifying sacred toponyms or place names pertaining to the mythic landscape.

Schele’s notebook for the 1992 XVIth Austin Workshop, a largely collaborative work with colleagues and students, detailed her investigation into era day activities where she sought to integrate era day texts with what was known from not only Maya epigraphy but Maya ethnohistoric documents, modern ethnographic data and cultural astronomy. As Carrasco (2010:602) has pointed out, Schele not only wanted to incorporate ancient and modern views about myth but “also look to nature for the source of mythological symbolism” (Freidel et al. 1993:76) in which astronomy played a major role; so much so, that associated iconographic programs with the texts were thought of as star maps of constellations and other night time events. Schele also employed the “direct historical approach” in her analysis, adding to it “ethnographic analogy” (Willey 1973:155). Her resulting interpretations were aided by ethnohistoric and ethnographic data from the

living Maya, especially Quiché naked eye astronomy. Villela and Schele (1996) would later summarize many of these views in a paper for the *VIII Mesa Rodonda del Palenque* where they interpreted of the “Maya Zodiac” within the depictions of “sky bands” of the Paris Codex.

Several important papers by Schele’s students at the University of Texas elaborated on key aspects of the era day story and were published as *Texas Notes on PreColumbian Art, Writing and Culture* in the early 1990s. These papers supported claims as to the astronomical nature of era day texts.Looper (1991a) elaborated on the possible connections between the three stars in the Belt of Orion and the “turtle constellation” within the murals of Bonampak as first noted by Lounsbury (1982) and later in Miller (1986b). Villela (1993) put forth evidence in favor that Maya iconographic programs linked the “three hearthstones” of era day texts with the “turtle of Orion” and that Quirigua’s Zoomorph P depicts a giant turtle. Looper (2002b) would slightly amend this view and later argue that Zoomorph P was an actual depiction of a “Water Throne” and reflective of one of the three stones of the cosmic “hearth” referred to in era day texts.

Many of these ideas later culminated in book by Schele, Freidel and Parker titled *Maya Cosmos: Three Thousand Years on the Shaman’s Path* (Schele, Freidel and Parker 1993). Chapter II of the book discussed era day passages from Tablet of the Cross at Palenque, Coba Stela 1, Quirigua Stela C, Kerr Panel 6593 and The Vase of the Seven Gods (Freidel et al. 1993:59-75). A central part of the story they attempted to reconstruct was the so-called “hearth event” recorded on Quirigua Stela C, east side, that describes the setting up of three “stone thrones.” The authors thought the mythic event to be like-in-kind to the placement and the triadic arrangement of three hearthstones in a contemporary Maya kitchen. They argued that the Quirigua reference to three stones was connected to a primordial act of centering the cosmos, and was analogous to the placing of three stones around a modern Maya cooking hearth, thereby, making habitable the cosmos and the world (Freidel et al. 1993:66-67).

Working from MacLeod’s previous interpretations of the “crossed-planks” T153 event, the Schele and Freidel interpreted the main era event as *hal k’ohba* “was manifested the image” (Schele 1992:123; Freidel et al. 1993:66-67). They argued that the “image” manifested was the “first turtle” (with three stars emblazoned on its back) to which they linked (via iconographic and astronomic patterns) the three belt stars of the Orion constellation. Also, they posited that modern ethnographic evidence from Momostenango (Tedlock 1982:181-18; Tedlock 1985:261), confirmed that one of the

three stars in the Orion “turtle” constellation overlapped with an adjoining constellation of a “three stone” hearth (comprising of a triangle of stars Alnitak, Saiph and Rigel) that surrounded a glowing fire (the Great Nebula M42). Due to their close proximity, the authors believed that these constellations of the cosmic turtle, and the hearth were conceptually linked and the “Hearth of Orion” was in fact the astronomical basis for the three “stone thrones” mentioned in the era day myth. Furthermore, they interpreted the painted scene from the Vase of the Seven Gods as a depiction of the “setting of the first of these three stones of Creation” (Freidel et al. 1993:67) with a “stone” represented by one of three tribute bundles brought before God L. Dennis Tedlock (2010:42) more recently has advanced this interpretation two steps (or two stones) further, claiming that the “triangle of star bundles in the [vase] painting is the mirror image of the triangle made by the actual stars in their rising positions.” In essence, the three bundles are a veritable star map of the Orion constellation and astronomical phenomena serve as a blueprint for key events and iconography in the era day story.

Other important Texas workshops relating to the inscriptions of Quirigua and Copan (Schele and Looper 1996) and another on the *Dresden Codex* (Schele and Grube 1997). The former provided a revised look at the era day texts and monuments at Quirigua and the sculpture program of *K’ak’ Tiliw* while the latter workshop offered a detailed look at era texts in the *Dresden Codex*, especially on page 24 of the Venus Tables.

From the Schele school of thought, a whole new generation of scholars continued to make forays into the mythic realm of era day. Matthew Looper published several papers detailing an explanation of the era day mythology as recorded at Quirigua (Looper 1991a; 1995a). These papers would later culminate in his doctoral dissertation (Looper 1995b) and work *Lightning Warrior, Maya Art and Kingship at Quirigua* (Looper 2003) where he presented an assessment of the era day myth as detailed on Stela C, Altar P’ and Zoomorph G. Looper argued that the pageantry and monuments of kingly accession at Quirigua and Palenque were inextricably linked to era day cosmology, especially to the three stone “thrones” erected by the gods. Creation myth was part of a political discourse “expressing the fundamental qualities of Classic Maya Kingship . . . [and that] the institution of rulership was set forth at the beginning of time, through the actions of the gods” (Looper 1995a:29). Looper would also argue that Quirigua monuments like Stela C, Zoomorph G and P were representative of the three stones of creation (Looper 2002b, 2003)

In 1998 Grube and Justin Kerr revealed a companion vase, the Vase of the Eleven Gods (K7750) that illustrated an almost identical scene and texts to that on the Vase of the Seven Gods (K2796). By all accounts, the vase must have been made in a similar Naranjo workshop or by scribes referencing the same source. Zender and Guenter's (2003:104-109) work "The Names of the Lords of Xib'alb'a in the Maya Hieroglyphic Script" offered a close examination of the god titles and associated iconography on the Vase of the Seven gods, giving new readings for the god names listed in the secondary text on the Vase of the Seven Gods.

I.9 Recent Studies

In recent years, the verbal artistry of the ancient scribes and their use of poetic discourse structures within era day inscriptions are being studied. Kerry Hull (2002) and Nicholas Hopkins (2009) have analyzed the poetic discourse of the era day passage on Quirigua Stela C. As Hopkins explains:

Classic Maya texts, while mostly devoted to the historical record, are not just lists of historic events but carefully crafted narrations, and we can now see at least the basic elements of a narrative style that constitutes a literary tradition, with a literary canon that constrains the writers to a set of norms (Hopkins 2009:1)

The study of poetics is still in its infancy but these initial inquiries reveal the refined literary and oral prose underlying the mythological texts.

Michael Carrasco (2005:448-466 and 2010:601-629) asserts that astronomy is not the only basis for era day myth. Incorporating the ethnographic work by Raphael Girard, he suggests that these foundation myths are rooted in Maya food ways and agricultural cycles, especially in the growth cycle and the production of Maize. In addition, he conducts an intensive philological examination of key terms from the era day story such as *jel* "change", *k'ob* "hearth" and *ti' chan* "mouth of sky" and elaborates on why the image of a hearth was used to represent a key symbol on era day (Carrasco 2005:448-466). Carrasco's (2005:464-466) work is also one of the first to analyze a newly discovered and lengthy era day text rendered on the back of an Early Classic green stone mask of the creator God GI. With its shared gods and place names, this important text demonstrates the strong continuity with later era day accounts written during the late Classic Period. Also in the same work, Carrasco offers a reading for the "**THREE-STONE-PLACE**" logograph quoted as the main the area where the era day "hearth

changing” takes place. Carrasco (2005:464) notes that the “**THREE-STONE-PLACE**” logograph carries a /**mi**/ suffix on Seibal Hieroglyphic Stairway Step 3¹². Carrasco tentatively proposes **SIIM TUUN** or **SAAM TUUN** (Yucatec) or **OX YOKET** (Tzotzil and Tzeltal); he suggests a full reading of the collocation might then read **UX SIM TUUN NAL** for “three-heated-stone-place” (Carrasco 2005:464).

David Stuart (2005a:161-170 and 2006a) in his reexamination of Palenque’s Cross Group gives updated readings for the era day texts written on the Temple of the Cross and the Temple of the Sun. He also adds a key event in the era day story: that of the “descent” of GI from the “the sky.” Due to the fact that the era day passage on the Temple of the Cross is compressed with another passage occurring on 13 *Ik*, GI’s descent was previously thought to take place on the latter 13 *Ik* date (Freidel et al. 1993:69). As will be explained in the present work, GI’s presence on era day corresponds well with the appearance of GI in several other era day texts. Stuart also adds to the mix the tentative hypothesis of GI’s identification with the primordial dawn and the god’s association with the solar rebirth (Stuart 2005b:170).

The most systematic study of Maya era day texts to date is by Lars Kirkhusmo Pharo whose work *Rituals of Time* (2006) who analyses the ritual practices of time especially those connected to major Period Ending celebrations of the Long Count. His study reviews and reinterprets decipherments of era day texts, the meaning of key terms and gods, in attempt to understand how the conceptions of era day myth relate to the historical ritual practice of time by rulers (e.g. monument dedications and auto-sacrifice). Pharo also incorporates into his reflections aspects of creation stories from the mythographies contained in later colonial Maya and Aztec sources pointing out parallel concepts of hearth and fire, especially those with the Aztec New Year fire ceremonies. Scholars like Carrasco (2005:122) and Stuart (Stuart and Stuart. 2008:212) also agree with such a connection.

In his recent book *The Order of Days: The Maya world and the Truth About 2012*, David Stuart (2011a) again ponders the era day story by offering revised interpretations on several key aspects. He revises a reading for the **k’o-ba** collocation, that is the subject of the *jel* event meaning “to change” or “to switch.” Previously, this most quoted of era day events was interpreted as *jehlaj k’ojob* for “was changed the hearth” (MacLeod in Schele 1992: 232-238). Stuart (2011a:216-219) now interprets the object of what is

¹² David Stuart (et al. 1994:26) pointed out earlier the /-**mi**/ suffix on the Seibal emblem glyph.

changed as not *k'ojob* but *k'oj* meaning “image”, “mask” or “face.” Here /-**ba**/ suffix attached at the end of *k'oj* root seems to be serving in the capacity of an instrumental suffix¹³. The new glyphic phrase reads something like *jelaj k'oj baah* for “the face-image changed” (Stuart 2011a:219)¹⁴. So what is meant by the “image” and in what manner does it change? Stuart offers the following interpretation:

Perhaps the word *k'oj* refers to masks, images, or faces that should be equated in some manner with the three sacred stones dedicated on that day by the gods. I suggest this as a possibility because we’ve long known that the three stone heads or masks along a celestial band comprise an important cosmological symbol for the Classic Maya, most often manifested as small portrait heads attached to ‘sky belts’ worn by Maya kings as part of the ceremonial costume for period-ending rituals. The ‘change of masks’ might then, refer to the idea of the cosmos getting a new identity of some type— a makeover of sorts— which in turn became symbolically reflected in the ritual dress of Maya Kings, and especially in their cosmic belts (Stuart 2011a:12).

Along with this revised interpretation of the era event, Stuart (2011a:220) also proposes a provisional reading for the mythical locale of the “three-stone-place” as *yoket* meaning “hearth” agreeing that it may indeed refer a three stone hearth. Yet, he offers no decipherment of the logograph or its apparent phonetic complementation. Rather, he considers the mythic locale as referring “to the establishment of a geometric ideal” like the Maya’s three part division of space (sky, earth, underworld) and the three part movement of celestial bodies across the sky (dawn, zenith, sunset; Stuart 2011a: 221-222).

¹³ Normally an instrumental suffix is attached to the verb root in order to derive a noun that indicates the instrument used to perform or achieve the action indicated by the verb (p.c. Sven Gornemeyer 2011). Schumann Gálvez gives the following definition in his 1997 Mopán grammar: “. . . se coloca después de una raíz verbal para se nalar instrumento que se usa o sirve para ejecutar aquello que la raíz verbal indica” (Schumann Gálvez 1997:82). As to how an instrumental suffix applies the root of a noun like *k'oj* is difficult at present to ascertain.

¹⁴ Interestingly Stuart’s reading of *k'oj* as “image” reflects back to a similar era day reading made by Linda Schele concerning the Kerr 6593 Panel. As Schele (1992:123) stated (using an earlier orthography), the key word “in the era expression is *k'oh*, *k'ohba* or *kohob*, all meaning ‘image’ or statue.” Also she thought that “*yilahi yax k'oh*” translated as “was seen, the image or statue”, and that “*hal kohba*” meant “appeared the image or statue” (Schele 1992:123; Freidel et al. 1993:65-66). Schele believed that the “image” referred to was a great earth turtle from whose cracked carapace the Maize God emerges (see K1892). Stuart (March 2011b) recently nullified Schele’s interpretation on K6593 Panel on the grounds of a faulty verb derivation and a misidentification of a historical ruler named *yax k'oj ahk chak k'u-*? *Ajaw* (Stuart 2011b). He does not however challenge Schele’s original assertion that the *k'oj* term spelled on Kerr Panel 6593 simply **k'o-jo** without the /-**ba**/ suffix.

Stuart also remains highly skeptical of overt astronomical readings relating the era day hearth to the Orion constellation. He flatly rejects the claims in *Maya Cosmos* that the iconography associated with era day can be interpreted as “figurative star maps depicting the various elements of the night sky in orientation to one another” (Stuart 2011a:299). He remains unconvinced of Schele’s other astronomical identifications of the Milky Way as the world tree (also known as the “Maya Cross”), and the constellation of the Big Dipper as “Principal Bird Deity” and the ecliptic as the Draped Serpent over the Cross, adding that Schele’s interpretations “seemed too much like assumption piled on assumption” which have not stood up well to “close scrutiny” (Stuart 2011a:301).

Finally, Stuart offers one more new reading to the mix concerning a sacred locale stated in the era day scene painted on the Vase of the Eleven Gods (K7750). As Stuart explains, the closing passage of the scene tells where the event takes place at a location called *K’inichil*:

This mythical location meaning “Great Sun Place,” perhaps referring to the realm of the sun god . . . Perhaps we are to believe that K’inichil, the sun’s locale, was still in primordial darkness when Creation occurred (Stuart 2011a:224).

The validity of this new reading will be tested in the coming pages of this study, especially in the analysis of the iconography of two Naranjo chocolate vases K2796 and K7750.

Most surprising of all these recent studies is that despite their major contributions to understanding Maya mythology and era day activities, not one of them has included a full survey and analysis of era day passages found within Maya inscriptions. A simple overview of the *Dresden Codex* offers a multitude of era day passages (linked by secure mathematical counts) not identified in any previous study. This obvious lacuna in scholarship, prompted the present work’s comprehensive and systematic review of all known era day texts.

Chapter II

The Role of Myth in Maya Literature

II.1 Introduction

It is the purpose of Chapter II to explore the general role myth plays in culture as a social function. I then contrast these functions against Maya conceptions of myth found in written sources. An etic definition of myth will be derived from anthropology, modern folklore and mythology studies. This etic understanding is then compared with an emic perspective of myth as defined by Maya sources in Colonial manuscripts and Classic Period inscriptions. The end goal is to understand how Maya scribes delineated between myth and history (if at all) and the different types of narrative genres that myth inhabited within Maya literature. In the process, it explores how myth (as in other traditional cultures) acted as a real “cultural force” (Malinowski 1971:13) within every day life of the ancient Maya. Finally, a broader understanding is sought by assigning myth to a context of “cultural memory” (Assman 2006:1-2) within society.

II.2 Myth and Culture

To begin, I employ a Structural-Functionalist approach to understand the general role myth plays within human society. Structuralism believes that the rules of society are made intelligible through their interrelations and that these relationships constitute a structure that manifest a set of “constant laws of abstract culture” (Blackburn 2008). Functionalism uses an organic analogy to view society and its institutions as an interdependent social organism; the organism is sustained by the function of its interrelated parts (Radcliff-Brown 1965:12). Despite its reductionist tendencies and synchronic view of society, Structuralism is still helpful in clarifying certain connections existing between social institutions. For instance, Radcliffe-Brown’s study of the Andaman Islanders (1964) outlines a “system of sentiments” that include a shared body of ideas, stories and beliefs that bind individuals together to form a common social

identity¹⁵. His description of social organization and interdependent relationships is general enough in its basic framework to be applicable to all human society:

A society depends for its existence on the presence in the minds of its members of a certain system of sentiments by which the conduct of the individual is regulated in conformity with the needs of the society. (2) Every feature of the social system itself in every event or object that in any way affects the well-being or cohesion of the society becomes an object of this system of sentiments. (3) In human society the sentiments in question are not innate but are developed in the individual by the action of the society upon him. (4) The ceremonial customs of a society are a means by which the sentiments in question are given collective expression on appropriate occasions. (5) The ceremonial (i.e. collective) expression of any sentiment serves both to maintain it at the requisite degree of intensity in the mind of the individual and to transmit it from one generation to another. Without such expression the sentiments involved could not exist.

(Radcliffe-Brown 1964:233-234).

Mythologist Joseph Campbell agreed with the Radcliffe-Brown's assessment, adding that within this "system of sentiments", the stories of myth play a determinant role in all societies by helping maintain a local system of beliefs which aids in shaping adolescents into young adults and holds these adults to given roles and ethics for the overall good (Campbell 1990:109). Yet myths are more than just a passing story. By their very nature the stories are born out of a social body and explore some of life's larger questions like the birth of the cosmos and man's role within it. Myth as a deeply embedded social identity is well established:

Myth fulfills . . . an indispensable function: it expresses, enhances, and codifies belief; it safeguards and enforces morality; it vouches for the efficiency of ritual and contains practical rules for the guidance of man. Myth is thus a vital ingredient of human civilization; it is not an idle tale, but a hard-worked active force; it is not an intellectual explanation or an artistic imagery, but a pragmatic charter of primitive faith and moral wisdom (Malinowski 1971:19).

¹⁵ The application of Radcliffe Browns work to the field of mythology was made early on by Joseph Campbell (1990:109). Although Campbell is often criticized for his diffusionist theories concerning contacts between world cultures, he remains a preeminent authority on ancient world mythologies, especially in their definition and interpretation, as is attested in his *Historical Atlas on World Mythology* (1983-1989) and *Masks of God* (1959-1968) series: *Primitive Mythology*, *Oriental Mythology*, *Occidental Mythology* and *Creative Mythology*.

Despite myths' oceanic depth and endless variety, it does function within a certain set of parameters. In a scholarly synthesis, Campbell (1964:3-8; 1990:7, 16, 51, 110, 129; 2001:1-5) describes the four basic functions of myth: (1) Mystical/Metaphysical—experiencing the sublime wonder of the universe, the *mysterium tremendum* beyond oneself and a recognition of the mystery of being; (2) Cosmological—explaining the origins, shape and content of the universe, including cosmic order and the origins of man; (3) Sociological—supporting and reinforcing social order of the greater whole, often through a moral code that shapes an individual; (4) Pedagogical—containing instructive teaching tales, strategies and values on how to experience a life under varied circumstances and challenges such as navigating through birth, love, sickness or death.

It is useful to apply the above criteria in understanding how myth on a general level may have functioned within ancient Maya society, especially as a set of referential stories or doctrines that served to inform and socialize the members of a community. From this viewpoint, mythology's basic intent is a teaching tool that helps to acculturate the individual for the benefit of cohesion within a group. Maya creation myths do serve as teaching tales to instruct and inform. For instance, creation myths told in the *Popol Vuh* (Girard 1979; Tedlock 1985; Christenson 2003) and the books of *Chilam Balam* (Roys 1967; Edmonson 1982; Knowlton 2010) serve to instruct its members on world origins and history while conveying the manner in which the gods created land, sky, and humans. Just how the Maya world order came into being is a basic theme of era day myth.

Before inquiring too deeply into the elements comprising this fascinating story, it is helpful to understand how the concept of myth is defined in western literature and how it distinguishes itself from that of other narrative genres like legend, folktale and fable. These etic conceptions then need to be contrasted with more Maya emic perspectives of myth.

II.3 Myth: The Etic Perspective

Due to the fact that the words “myth,” “legend” and “folktale” have multiple meanings throughout various western academic disciplines, it is important that these three terms be qualified in the current work. Myth, legend and folktale all originate from traditional prose narratives. One of the most important distinctions between these literary genres for the western mind is made by the teller himself. As Brunvand (1978:99) notes the teller distinguishes one genre from the other by a specific value of “truth” or fiction he

assigns to each, their settings and main characters. Mythic narratives, are considered by the teller to be “truthful accounts of what happened in the remote past . . . and have as their principal characters gods or animals” (Brunvand 1978:99). Veracity then, is a key factor in distinguishing myth from other types of stories. In addition, myths can employ a pictorial language of symbols to embody sacred, metaphysical, psychological, and sociological truths and these symbols are used to teach, instruct and socialize (Campbell 1990:16).

A legend on the other hand, can either be a sacred or secular story that is set in the more recent historical past referring to the immediate life and setting in which a society lives, and generally has humans in major roles (Brunvand 1978:99). As part of human history, a legend is thought to be based on a real historical hero or circumstance but an absolute truth it is not. Furthermore, legends are “reviews of a traditional history (or of episodes from such a history) so rendered as to permit mythological symbolism to inform human events and circumstance . . . legends may furnish entertainment incidentally, but they are essentially tutorial” (Campbell 1990:16). On the scale of veracity, legends hold only partial historical truths and are similar to those Arthurian legends of old in which principal characters and settings are to be related to actual people and events of English history (but not with complete historical accuracy).

Folktales and fables are the last to be defined. Folktales “can take place at any time and are regarded by their teller as fictional stories” (Brunvand 1978:99) so they are definitely not stories based on absolute truth. Therefore, folklore should not be directly equated with myth since the teller assigns opposite values of truth to each. Broken imagery and motifs from myth and legends can serve to color a folktale but it is essentially considered a fictional account. Finally, a fable is known not to be true at all but is a didactic tale that teaches lore or a societal lesson. It is not, like a myth that imparts wisdom from a sacred truth or transcendental mystery, but it is “a clever illustration of a political or ethical point. Fables are witty, and not to be believed but understood” (Campbell 1990:19).

According to Brunvand and Campbell, a myth carries five basic conditions:

- 1) It is a traditional prose narrative that is viewed as a truthful account
- 2) It occurs in the deep, remote past.
- 3) Its principal characters are often (but not limited to) gods or animals.
- 4) The story uses images and motifs or a pictorial language (e.g. symbols like a circle or a cross) to describe core truths

- 5) Myths impart life wisdom for the spiritual welfare and identity of a community.

Whether or not the ancient Maya era day myth follows the same conditions as those stated above, is difficult to assess given the current evidence. Certainly the era day myth is a godly narrative occurring in the remote past that uses a pictorial language to impart truths on how the world came to be. Yet, the measure of “truth”, and with it veracity, may vary depending on the heart of believer and his knowledge of the world. What can be discerned however, are a selection of beliefs and sentiments about myths recorded in several Maya chronicles. These myths serve certain functions within a specific social context and are the focus of the next section. As we shall note, Maya scribes did not see myth and history as separate categories but rather synthesized the two into a single narrative genre (Girard 1979:5). Maya mythic and historical narratives work not in opposition but are complementary to one another, and seek to form a “single, balanced whole” so that “the presence of a divine dimension in narratives of human affairs is not an imperfection but a necessity, and it is balanced by a necessary human dimension in narratives of divine affairs” (Tedlock 1996:58-59).

II.4 Myth: The Emic Perspective

Do myths occur in Maya literature, and if so what are there functions and what indigenous literary genres do they take? Classic Maya chronicles (Schele and Freidel 1990; Schele and Mathews 1998; Martin and Grube 2000) and Maya Colonial manuscripts of *Chilam Balam* (Brinton 1882; Roys 1967; Edmonson 1982; Knowlton 2010) record myths and histories indexed by precise dates clarifying whether the event occurred within a historic or remote past.

The Classic Maya recorded historical chronicles that speak of the life, times and rituals performed by the ruling elite. In these chronicles, myth legitimized the power of the hierarchy by showing how kingly actions were entwined with the supernatural and were divinely sanctioned (López Austin 1993:285). For instance, a series of “*k’atun* histories” (events chronicled over twenty year time spans) are found on Palenque’s Temple of the Inscriptions (Figure II.1). These inscriptions recount the life and times of *K’inich Janaab Pakal I* and his lineage, wars with rival cities and the destruction and reinstatement of the city’s patron gods (Schele and Freidel 1990; Schele and Mathews 1998:101-109; Martin and Grube 2000:164-165; Guenter 2007). A large portion of these

texts is concerned with the caring and the adornment of the city's patron gods who were previously vanquished by rival polities. In the same context, scribes also record godly actions from the deep primordial past before the start of the current era in 3114 BC.

K'inich Janaab Pakal I connects the anniversary of his accession to the accession of a primordial god one and a quarter of a million years earlier (Schele and Mathews 1998:106-107; Guenter 2007:42). By giant mathematical leaps, *Janaab Pakal* had scribes forecast into the distant future events that would occur at the end of the 12th *bak'tun* (1618 AD) and 14th *bak'tun* (2407 AD) cycles (MacLeod and Van Stone 2011). Ultimately the king ties the anniversary of his accession to coincide with a future *piktun* ending occurring in 4772 AD (Schele and Mathews 1998:107; Guenter 2007:44). *Janaab Pakal* is linking his actions to godly deeds and primordial time events to purposefully reaffirm a deep connection to ancestral gods and time.

This mixture of time-past, time-present, and time-future set within the framework of the calendar suggests that the Maya did not divide the past from the present as we do (Aveni 1989:209). Similarly, sequential *k'atun* histories are found in the books of the *Chilam Balam* from Colonial times that detail the rise and fall of ancient cities of the Yucatan, the people and the leaders who ruled them (Brinton 1882; Roys 1965; Knowlton 2010). Each *k'atun* held prophecies while evoking what had transpired in the previous *k'atun* of the same order so that past in some way reflected the present. As Aveni (1989:209) explains, "If you paid close enough attention to time, you could see that the past already contained the future." Here is a section from the *Chilam Balam of Chumayel* describing the prophecy for *K'atun 11 Ajaw*:

Katun 11 Ahau is set upon the mat, set upon the throne, when their ruler is set up. Yaxal Chac is its face to their ruler. The heavenly fan, the heavenly wreath and the heavenly bouquet shall descend. The drum and rattle of the lord of 11 Ahau shall resound, when flint knives are set into his mantle. At that time there shall be the green turkey; at that time there shall be Zulim Chan; at that time there shall be Chakanputun. They shall find their food among the trees; they shall find their food among the rocks, those who have lost their <usual> food in katun 11 Ahau . . .
(translation by Ralph Roys 1967:30).

From this small excerpt it is clear that the *K'atun 11 Ajaw* will hold a time of great strife when food will be lost and found only among the rocks. *K'atun 11 Ajaw* was indeed a time of woe. It heralded the arrival of the Spaniards and the subjugation of the Maya people. As the history records suffering and strife dominated the land:

It was only because these priests of ours were to come to an end when misery was introduced, when Christianity was introduced by the real Christians. Then with the true God, the true *Dios*, came the beginning of our misery. It was the beginning of tribute, the beginning of church dues, the beginning of strife with purse-snatching, the beginning of strife with blow-guns, the beginning of strife by trampling on people, the beginning of robbery with violence, the beginning of forced debts, the beginning of debts enforced by false testimony, the beginning of individual strife, a beginning of vexation, a beginning of robbery with violence . . . (translation by Ralph Roys 1967:30).

Myth and prophecy give order by organizing knowledge and defining patterns in time to classify the cosmos (López Austin 1993:284). Ultimately, these deterministic prophecies held strong influence over the people of the Yucatan and played a key role in convincing the Itzá Maya to lay down their arms and relinquish power to Spanish authority (Stuart 2011a:187-18).

II.5 Genres of Mythic Narrative

As language, myth is “myth-narration” and a product of “myth-belief” and contains certain styles of storytelling (Lopez Austin 1993:197). Maya writings offer clear distinctions between several genres of creation mythology and are very much native literary classifications. Timothy Knowlton (2010:1 and 142) in his analysis of creation myths contained within the *Chilam Balams* and a set of prayers called *The Ritual of the Bakab’s*, points out that these writings offer no specific word for “myth” nor are there words for legend, and folktale; they do however contain three distinct genres of creation myths that include the terms *u thanil*, *kay*, and *kahlay*, or “incantation”, “song” and “history.” Knowlton explains that all three of these genres invoke facets of mythic discourse by making references to or recounting cosmogonic acts (Knowlton 2010:2 and 143). As López Austin (1993:201) states, “The operative rationality of the indigenous mythic genre makes it a prime source of information.” How scribes used these genres deserves further inquiry.

U thanil are a set of medical-magical incantations used to diagnose and treat illness (Roys 1965; Knowlton 2010:142). Yucatecan *curanderos* used these medical treaties to cure patients. As Diego de Landa wrote, “There were also surgeons, or to be more accurate sorcerers, who cured with herbs and many superstitious rites” (Roys

1965:x). The *Relaciones de Yucatán* mentions the following as a cure for treating for snake bites:

Formerly in the time when they were pagans, they took measures to cure themselves of this poisoning by means of spells and enchantments. There were great sorcerers, and they had their books for charming and enchanting them. With a few words that they recited they charmed and tamed poisonous serpents (Ralph Roys 1965:x).

A well known set of these charms are found in the book *The Ritual of the Bacabs*, written possibly in the last half of the eighteenth century (Roys 1965:vii). Several charms are not so much creation stories but a set of prayers used in healing ceremonies where cosmogonic time and geography are invoked for the purpose of transforming the mind of the patient (Knowlton 2010:142-143). The correct diagnoses depended on naming the malevolent “wind” that brought the disease into the patient. The *curandero* assigned to each disease/wind the day and the quadrant from which it was born along with its characteristic color, tree, animal and food. The following is the Incantation for Jaguar-Macaw Seizure:

1 Ahaw, the everlasting (recurring) 4 Ahaw
4 Ahaw was the creation
4 Ahaw was the darkness
When you were born
Who was the lord of your creation?
Who was the lord of your darkness?
The great Sun Lord, Snatcher of the Eye of the Sun, created you
When you were born
Who was your Mother?
Who was your Father?
When you were created?
Red Ix Chel
White Ix Chel
Lady Universal Point of Lancet
Lady Universal Point of the Penis
This is your mother
This is your genital father
Ascended behind it

Ascended behind the tree
The steam bath bore you
The frenzy of creation
The frenzy of darkness . . .

(Translation by Barbara MacLeod and Andrea Stone in Schele 2002:22-32)

The incantation is to cure a patient of the Jaguar-Macaw Seizure. It names 4 *Ajaw* as the day the afflicting malady was born; 4 *Ajaw* also invokes the era date; its progenitors were the Sun Lord and the Goddess *Ix Chel* and it emerged from a primordial bath of steamy, frenzied darkness (Schele 2002:25). Further on in the incantation the speaker assigns to the disease the four color-coded quadrants from which it was born by naming the tree/arbor that it inhabits:

Who is your tree?
Who is your bush?
What was your arbor,
when you were born?
The red tancas-che,
the white tancas-che
the black tancas-che
the yellow tancas-che
the red kantemo-tree
the white kantemo-tree
the black kantemo-tree
the yellow kantemo.
These were your trees
you macaw-seizure . . .

(Translated by Ralph Roys 1965:4)

If the natal origins of the sickness could be discerned within the four-fold geography of creation then it could be called out, its genealogy identified, and be dramatically exorcised from the patient (Schele 2002:25). In this case, eight trees and their corresponding cardinal colors (red-east, white-north, black-west, yellow-south) are named as places of residence¹⁶. The power of the *curandero* lies in his ability to know the

¹⁶ Interestingly, the “*tancas-che*” can be translated as “seizure tree” or “Milky Way tree” (Roys 1965:3; MacLeod in Schele 2002:27) so the double reference here may indicate that the sickness was hidden within the starry path of the Milky Way on the day of its creation.

complete activities of the sickness, its day of origin, its parentage, the place of its birth and the tree it inhabits (Roys 1965:xii). Calling the disease out by its name, identifying its shameful origins allows for its eradication.

Another mythic genre contained in the *Chilam Balams* is *kay* and are mythic songs found throughout *Chumayel* manuscript (Roys 1967:116; Bricker 2002:1-20; Knowlton 2010:154). These songs include the *Ritual of the Angels* which is comparable to the sung Latin of the Catholic mass; it is a song about the fall of the Maya capital of Chichen Itza (itself inserted into a creation narrative) and its eventual overthrow by Hunac Ceel; another song is the *Creation of the Winal* that chronicles the birth and first steps of the number twenty followed by a count of twenty days (Knowlton 2010:180-181). Of these three songs, *The Creation of the Winal* is by far the most elaborate recounting of a mythogenic act that took place before the creation of the world (Roys 1967:116; Brotherston 1992:285-92; Bricker 2002:1-20; Knowlton 2010:154). The song describes the birth of the number twenty and its measured steps in the east as it circumnavigates the sky, laying out a trajectory of days by which the sun and stars will be later measured by (Brotherston 1992:288; Bricker 2002:1-20; Callaway 2009:81-86; Knowlton 2010:153-160). The momentous event of the birth is then followed by a count of twenty days in which all the world is set in order. With this story, the reader is then brought forward to the establishment of the new era on the day 4 *Ajaw* (Brotherston 1992:228). The story itself is told in very esoteric terms with lots of a numerical counts and puns that reflect the day name and its respective event. Also events are indexed by coefficients and day names so that the creation story is literally retold through each calendar day. Due to the song's lengthy prose only a short excerpt can be given here:

. . . This is a song of how the uinal came to be created before the creation of the world. Then he began to march by his own effort alone. Then said his maternal grandmother, then said his maternal aunt, then said his paternal grandmother, then said his sister-in-law: 'What shall we say when we see man on the road?' These were their words as they marched along, when there was no man <as yet>. Then they arrived there in the east and began to speak. 'Who has passed here? Here are footprints. Measure it off your foot.' So spoke the mistress of the world. Then he measured the footstep of our lord, God the Father.

This was the reason it was called counting off the whole earth, lahca (12) Oc. This was the count, after it had been created by <the day> 13 Oc, after

his feet were joined evenly, after they had departed there in the east. Then he spoke its name when the day had no name, after he had marched along with maternal grandmother, his maternal aunt, his paternal grandmother, his sister-in-law. The winal was created, the day, as it was called, was created, heaven and earth were created, the stairway of water, the earth, rocks and trees; the things of the sea and the things of the land were created . . . (Translation by Ralph Roys 1967:116).

As Gordon Brotherston (1992:288) pointed out, the *Winal*'s birth occurs before the creation of the world (the text says when the "day had no name") and is no less than the birth of man's conscience and his rational ability to measure and map the skies; it is analogous to "In the beginning was the word"; or in this case in the beginning was the *Winal*" (Brotherston 1992:289).

Kahlay is the last genre to be discussed and is defined in the Yucatec as *memoria* for memorial (Ciudad Real 2001:319 after Knowlton 2010:37). It is a history containing episodes of creation mythology and more recent chronicles; it frames these events to a fixed sequence of twenty year time spans called *katuns*. As 17th Century Historian Cogolludo writes:

"They [the Maya] counted their eras and ages, which they put in books of twenty years subdivided into periods of four year . . . counting five of these periods, they make up twenty years called a katun. And they place a piece of carved stone atop another stone, fixed with lime and sand in the walls of their temples and houses of their priests, like the ones sees today in the buildings they have made . . ." (Translation by Timothy Knowlton 2010:38)

Therefore these books written in their native logo-syllabic script served as a source of recorded history long before the arrival of the Spanish. As Knowlton (2009:14-15; 2010:37) convincingly argues of the three genres, *kahlay* has its roots in the Maya Classic writing. He offers evidence discovered by Grube (1994:339) that the term *kahlay* is referenced in Classic inscriptions on a stela from Xkombec; here, the verb stated is **k'a-ja-l(a)** for the word "*kajal*", "to remember or record" with *kajal* being the word from which *kahlay* is derived.

The following excerpt of the *Chilam Balam of Tizimin* speaks of *K'atun 13 Ajaw* when there was visited much suffering, war, drought, and pestilence on the people of the Yucatan:

On Thirteen Ahau

The burden of the katun fell to the people of Emal
 And thus ended the tun of Zuyua
 And thus there are five division of the savanna
 When Salam Kohcheil will arrive with the burden of the five divisions of the
 savanna
 The long-suffering canul had arrived here . . .
 And removed the overwhelming burden here at Sac Lac Tun . . .
 There are seven multitudes of burden here
 Here the entire word of the katun is complete
 Perhaps seven are the years here of drought
 And seven years of pestilence . . .
 Then the great destruction of the world arrived
 Then the great Yizam Cab Ain ascended that this deluge may complete the word
 of the katun series
 That the word of the katun might be complete
 (*Chilam Balam of Tizimín* 14V.1-10, 20-22; Translation by Timothy Knowlton
 2010:121-122).

Notice that seven years of suffering are juxtaposed in the destruction of the world by a
 flood brought on by the celestial crocodile *Yizam Cab Ain*; the turn of the *k'atun* brings
 impending threats of doom; such hardship and pending destruction is part of a cycle of
 mythic history and prophecy inherent in the cycle of *k'atuns* (Knowlton 2010:122).
 Fortunately, the people of the peninsula are spared the cataclysm since *Yizam Cab Ain*
 ascends to the heaven before (as we learn in later prophecies) he descends in a flooding
 torrent (Knowlton 2010:74).

Throughout all three mythic genres of *u thanil*, *kay*, and *kahlay* it is clear that
 there are no distinctions between the concepts of myth and history (Knowlton 2010:181).
 They are in fact nested concepts so interlaced that they are presented as a single wedded
 narrative. Nowhere is this made more obviously stated than in the preface to the collected
 myths and history in *Chilam Balam of Chumayel*:

It is essential to believe this way
 That our lord the Father abandoned this stone
 It blasphemes
 It is a wild animal
 while we revere it here, we who are the sovereign people

These [stones] are worshiped with much care
as true ones, as divine ones
These [stones] are seated as the true deity
Our Lord who is God, in the Lord of heaven and earth, is the true deity
even though, as for the first deities
they are perishable deities
The word of their worship is over
They were invalidated by the blessing of the Lord of heaven
that accomplished the redemption of all things in the world
that accomplished the resurrection
the true deity,
The true God
who blessed heaven and earth
Then your sacred images were invalidated, you Maya people
Deliver your heart from these sacred images of yours!

The World History of the Era
This was written for this reason
because the day of this task has not yet arrived
As for these books,
these many words,
Are for the Maya people here when inquired
if they know how they had been born
and the founding of the world
here in this peninsula.

(*Chilam Balam of Chumayel* 42.6-2; Translated by Timothy Knowlton 2010:36).

The author of this manuscript is incorporating ideas of Christian Colonialism into the established pre-Hispanic Maya historical tradition and gathering together a collection of local and biblical myths creating a hybrid history of old and new world traditions (Knowlton 2010:39). The preface states that the “history” being told starts with the founding of the “era” and one that encompasses the “founding of the world”; the title the author gives to this account is “*u kahlay cab tu kinil* for the “World History of the days” and it is a history that occurs before Christianity arrives and before the conversion of

Maya the people, suggesting that the scribes saw creation mythology as a foundation for their own history (Knowlton 2009:32-33; Knowlton 2010:39).

The melding of history with myth is also evident within other accounts of creation like that in the *Popol Vuh*, the Quiché Maya creation epic. The Quiché document draws no clear distinction between myth and history, so that the first four men of humanity (“framed and shaped” out of corn dough by the gods) become the historical founders of the Quiché nation (Christenson 2003:194-202). The scribes’ conception of history is one in which “the mythic accounts in the book are also historical narrations; that is, they form a “mytho-history” (Girard 1979:5). Therefore, from a Colonial Maya perspective, one can not seek to divide myth and history into separate categories; rather, one must embrace them as a history that was written in terms of mythological thought, which, in the mind of the scribe, was a historical narrative (Girard 1979:5).

II.6 Myth as a Device of Activation and Transport

It is a misconception to believe that Maya myth is a story relegated solely to the remote past. The words themselves contain animate power that when told become alive linking the teller and the audience directly to the primordial actions of the gods. As Christenson (2003:21-22) explains the authors of the *Popol Vuh* describe the sacred text as an “*ilb’al*” or “instrument of sight” to which the reader can “envision” the very ruminations and godly council of the ancestors and in doing so divine the past, present and future; for this reason the opening chapters of the *Popol Vuh* describe the creation of the world in the present progressive voice. Christenson points out that it is as if the story was occurring immediately before us with “time folding back upon itself to transport the reader into the primordial waters of chaos at the very moment the first land emerged” (Christenson 2003:21):

This is the account of when all is still silent and placid.

All is silent and calm. Hushed and empty is the womb of sky . . .

The face of the earth has not yet appeared.

Alone lies the expanse of the sea, along with the womb of the sky.

There is not yet anything gathered together.

All is rest. Nothing stirs.

(Translated by Christenson 2003:21-22).

The telling of this story is an activation and an actualization of world creation; told in the present voice, it transfers the original story from primordial time into the present moment to be relived and experienced; it is a type of actualization that is not very different from the words uttered during the rites of the Christian sacrament when Christ's story is recited and brought forward into the present moment and out of primordial time (Van der Leeuw 1958:33). Riviera Dorado (1986:194 in López Austin 1993:54) states that for the Maya:

. . . past, present and future co-exist simultaneously . . . Events do not occur little by little, but are always present in the aggregate, awaiting their opportunity to occur, following the rhythm of the sacred calendars¹⁷.

For the Maya, myth functioned as a tool of activation and a transport that dissolved the past and present into a single moment.

Myth as a tool of activation is expressed in a variety of fascinating ways within the art and writing of the Maya Classic Period. This is especially true in those instances where scribes fused the historical with mythical chronicles to help legitimize authority of the king. Three examples can be recounted here. The first is from Yaxchilan Temple 33, the second is from Palenque Temple XIX and the third is from Quirigua Zoomorph G.

Carved blocks from Yaxchilan's Temple 33, Step VII (Figure II.2) retell an ancient myth—the story itself is depicted as inscribed within a stepped frame of a stairway on which the historical king “Bird Jaguar” IV is kneeling (in full ballcourt regalia) ready to deflect a ball in the form of a bound captive (Schele and Freidel 1990:282-283; Martin and Grube 2000:130). The myth tells of the decapitation of three gods and then ties these deeds to the historical sacrifice of captives by Bird Jaguar IV in his ball court. The conduit that links the acts of sacrifice is a massive Long Count stated as 13.13.13.13.13.13.13.9.15.13.6.9 3 *Muluk* 17 *Mak* (blocks H1-O1) that pierces the membrane of time, linking past and present. The scene illustrates most vividly how myth was embedded in the sacred rites of the Classic Maya and how strong a role myth played in framing ritual behavior of the elite. In this instance, the king is actualizing a myth and reliving the sacrifice of three gods through the sacrifice of a ballcourt captive. As Mirce

¹⁷ At this point it is worth recalling Malinowski's keen observation that myth is: “not merely a story told, but a reality lived— not an intellectual reaction upon a puzzle, but an explicit act of faith— a statement of primeval reality which still lives in the present-day life and a justification by precedent” (Malinowski 1971:18, 91).

Eliade (1959) noted in *The Sacred and the Profane*, the deeds of gods survive in the present and are activated via rituals that evoke their ancient stories.

At Palenque the Maya venture to record their history side-by-side with the history of the gods. Nowhere is this marriage of myth and the acts of a king more evident than on Palenque's Temple XIX platform (Figure II.3) where *K'inich Ahkal Mo' Naab III* and court nobles reenact the mythic accession of a patron god GI during his own historical kingly accession (Stuart 2005b:19-22; Stuart and Stuart 2008:225-230). Both godly and kingly acts of accession occurred on the same calendar day 9 *Ik'*. The participants even go as far as to dress up in the garb of the gods: *K'inich Ahkal Mo' Naab III* wears the heron headdress of GI and his priestly attendant dons the headdress of the god *Itzamnaj*; the captions beside each principal figure identify them as "in the guise" of their respective gods (Stuart 2005b:19-22; Stuart and Stuart 2008:225-230). Historical kings not only went so far as to dress in the garb of the gods but they sought to replicate the archetypal acts of remote ancestors; by doing so, they showed that the ancient acts were not only renewed in a new time and place (Girard 1979:8) but their earthly deeds replicated that of a higher, more divine order. On the Temple XIX platform, one sees a glimpse of how myth just is not merely a story but a "living reality" (Malinowski 1971:18) that is legitimizing the right to rule and acting as guarantee for the life of the participant. A revival of a primordial myth or rite is not confined to the past or the present moment. In the mythic mindset primordial acts (e.g. first sunrise or the first sunset) are replayed in the circular course of time so that in the past, and in the distant future, there is only primordial time with its initial acts being repeated again and again, within the present moment (Van der Leeuw 1958:336).

At Quirigua even death does not bar the now dead ruler *K'ak' Tiliw* from performing his future calendar rites. Scribes on Zoomorph G (the king's death monument) record that the king *K'ahk' Tiliw* has died and record his death date (11 *Ik'* 5 *Yax*) in blocks N'1-M'2 of the text. In the very next passage, they count forward to the 10th *bak'tun*, or quite possibly forward to the future 9.17.15.0.0 period ending (Stuart 2011c). The text then clearly states that the 5 *K'atun* Lord (who is *K'ahk' Tiliw*) is there to commemorate future period ending rites with a *k'al* binding event (blocks N'2-M'3). So here is an explicit statement that a dead king will commemorate a future rite beyond the grave (Looper 2007:98).

In the ancient Maya world it is impossible to divorce myth from that of Maya history, religion, numerology, mathematics, medicine or any facet of their society; rather,

myth can coalesce with any objective or subjective thought or social institution. One more example drives the point home on the inseparability of myth with all forms of rational thought. For the ancient Maya, time itself was the child of myth. Nowhere is this connection more apparent than in Maya mathematics (Thompson 1971:12), where numbers, despite their rational purpose as integers for calculating sums, are synonymous with terrestrial and celestial gods (e.g. the number eight is the Maize God and the number three is the God of Flowers and Song). On any given Long Count inscription, time can be fantastically recorded by a procession of celestial beings and gods who lift and drag zoomorphic time periods into place. For instance, Copan Stela D (Figure II.5) depicts time fully animated with full-figured gods as numbers toting on their backs with tumplines the various time periods— like merchants carrying goods to a market place. As Aveni (1989:206) states:

We can see the neck muscles of the Maya gods of number straining at the pull of cargo on their tump lines as they are about to pause for a rest before exchanging loads. This discontinuous concept of time, an interval of rest-completion following a period of bearing the burden, is central to an understanding of the Maya philosophy of time.

Here time materializes as two living gods. When a god of a number and time period unite, they create a time unit with one as bearer and the other the load (López Austin 1993:172; Thompson 1971:59) On Stela D, Maya scribes are vividly showing how time and myth are fused. Myth personified time and molded into merchant gods.

The ancient Maya take time to even further extreme by fusing it with the image of man himself. Not only were the gods a manifestation of time but Classic Maya art portrays the very ruler as the embodiment of the day— as time personified. This is most notable when the ruler's portrait replaces that of the twentieth day sign *Ajaw* (Stuart 2011a:257) from the 260 day calendar (Figure II.6), as occurs on the Puerto Barrios Altar (as the day 9 *Ajaw*) and Machaquila Stela 13 (Houston et al. 2006:89-90; Stuart 2011:256-57). Significantly, the “day sign cartouche” that frames the portrait of king is also the glyph for human blood and sacrifice (Houston et al. 2006:93-95) when used outside of a calendar context. The cartouche as a blood scroll is depicted as a hand holding a sacrificed head issuing a blood scroll on Chocoma Monument 1 (Figure II.8). The scroll is the same three-part drip at the base of the calendar cartouche). Early examples of the cartouche like on Kaminaljuyu Stela 10 (Figure II.7a-b), are depicted

with dripping, bloody tassels (Houston et al. 2006:93-95)¹⁸. By framing the calendar day name with a blood sign, scribes seemingly are connecting the flow of sacrificial blood to rulers and also to the flow of time. In the portrait of ruler as the day *Ajaw* we are seeing a direct connection between time and kingship, connections that no doubt originated in primordial time.

II.7 Man as Time

To what degree a king saw himself as the full embodiment of time is difficult to gauge given the present evidence. Yet, it is understood that the number twenty, called *winik* (the vigesimal base of calendar calculations), also bears a direct human connection. The name *winik* is synonymous with the general word for a human being, a creature who counts and measures the passing days using twenty fingers and toes (Barrera Vásquez 1980:923; Houston et al. 2006:59). As recorded in the *Dresden Codex* (Callaway 2009) and later the *Chilam Balam of Chumayel* (Brotherston 1992:228; Bricker 2002:1-20; Knowlton 2010:153-160), the number twenty has to be born into the world near the start of the era. The birth of this number is also the birth of man's consciousness and his rational ability to count the stars and map the sky (Brotherston 1992:288). Concepts of time then are embedded in ideas of human blood, portraiture and counting, with the last originating in primordial time. Maya rulers were not content with simply counting time; they represented themselves as temporal beings via portraiture and calendar nomenclature offering vivid testimony that man not only observes time but "man is time" (Van der Leeuw 1958:326). Time only exerts a presence when man acknowledges it.

II.8 Conclusions

The modern misconception that myth is somehow a distant memory far from any tangible everyday experience is too simplistic a view when trying to understand the nature of how myth functioned within Maya society. From our small glimpse of the various manners that myth manifested itself, one immediately sees how differently it is expressed in the collective writings of the Maya. As an incantation, Myth acted as a tangible instrument, like a doctor's stethoscope that aided in identifying and bringing to light a

¹⁸ (see also Izapa, Miscellaneous Monument 60).

sickness hidden deep within the patient. The myth recited in the *Popol Vuh* serves not just a fanciful story, but as a divining lens to view the minds of the ancients; so powerful are its words that it has the ability to transport the reader back in time and experience the primordial act as it happens. Classic inscriptions record through rites and elaborate godly regalia how myth consecrated kingly actions serving as a mythic-religious platform by which one legitimized ruling power. Even numbers were cloaked in mythic garb of the gods and rulers portrayed themselves as the embodiment of time. In fact, the pictorial language of myth (its gods, godly regalia, symbols and sacred locales) is so pervasive in Maya art, writing and architecture that one must admit that myth was deeply interwoven into the fabric of daily life.

Maya myth is better viewed as not just as words recorded in some arcane text but an act of public remembrance that is, as Jan Assman proposes, part of the collective “cultural memory” of society; as a memory, a myth is part of the greater social phenomenon that imprints into our inner minds and is constantly conditioning us while at the same time linking us to the greater social world (Assman 2006:1-2). As with a personality or language, myth is shaped through a myriad of social networks and mediations; it is a living, pulsing, tangible memory a real “cultural force” (Malinowski 1971:13) that functions to shape the private, social, conscious and unconscious of our lives. When myth is viewed as cultural memory, it is easier to understand why it so thoroughly pervades Maya ritual, art, writing and architecture since it is constantly informing both the internal personal identity as well as the external social identity. Myth is a story that ponders life’s larger questions and so it is endowed with a philosophy of how things came to be, and with it, a rationale for the structure of the universe. Myth thereby acted for the ancient Maya in a similar fashion as does the philosophy of western science, as a storehouse of knowledge that shapes and guides one’s view of the world.

Chapter III

Translations and Commentaries of Era Day Passages

III.1 Introduction

Chapter III (along with Chapter IV) presents the core data set of the thesis, a survey and translation of all known era day inscriptions as well as those potential candidates for era day passages. The chapter begins by giving the criteria needed to identify an era day passage within the Maya corpus. It then speaks about the current methodology employed in making a translation. Preferences are also stated concerning the three levels of transliteration, transcription and translation that Epigraphic Mayan undergoes as it is rendered into a western style of prose.

Prefacing each translation is a list of pertinent source material (e.g. archives, photos and publications) pertaining to each inscription. Whenever possible, a transliteration, transcription and translation will follow for each passage. Era day passages found on monumental sculpture are the first to be discussed followed by examples in codices and on vases. After each translation, a commentary is given that explores underlying ideas contained within each text.

III.2 Identifying an Era Day Passage

Era day passages are found on a wide range of media including: stone monuments, painted pottery, inscribed bones and painted codices. They can be identified with the era date by various ways. First and foremost, a text is positively identified as belonging to the inaugural date when its Calendar Round date of 4 *Ajaw* 8 *Kumk'u* is accompanied by a Long Count of 13.0.0.0.0 as happens on Coba Stela 1 and Quirigua Stela C. Most commonly, rather than a stated Long Count, the era date is connected via a Distance Number that counts forward or backward from a mythical or historical date; two good examples of a back calculation from a historical anchor appear on Quirigua Altar P' and *Dresden Codex* page 24, Column C.

The era day 4 *Ajaw* 8 *Kumk'u* as a Calendar Round was so readily identifiable that readers instantly recognized its mythical *gravitas*. Yet if the date was simply written as a Calendar Round Date, with no connecting Long Count or Distance Number, then the reader must consider that the day 4 *Ajaw* 8 *Kumk'u* might not be the era base date but just

a day located within any number of permutations of the 52 year Calendar Round Cycle. Just such a case occurs on the Vase of the Seven Gods (K2796) and the Vase of the Eleven Gods (K7750). Rather than stating a full Long Count and date, scribes offer only the 4 *Ajaw* 8 *Kumk'u* Calendar Round date followed by a list of gods. In addition the two vases offer detailed illustrations of a dramatic era day event occurring within the Underworld Court of God L. So richly seeded is the mythic scene with creator gods inside the incubus of a primordial mountain, that the era day story is instantly recognizable, even without a textual Long Count for a reference. Finally, except for the stated era date, there are mythic passages that have no readily apparent direct mathematical or pictorial link to verify their era day connection such as on the *Dresden Codex* Serpent Number Pages and its multi-layered texts from page 61 (A1-B10) and 69 (C1-D10). In this case, the larger context of the passage and its relationship to the almanac must be taken into consideration to identify it as an era day text. Like with other almanacs in the book, the era date in these cases is positioned at the start of the almanac and serves as one of two major base dates to reckon calculations that follow. In addition, the text before and after the era date (as will be discussed) is bursting at the seams with nutrient-rich material of mythogenic sustenance and mathematical sense, leading up to and digressing from the era date, such as the creation of the number 20 (a pre-era day event) and the emergence of the *bak'tun* count (a post era day event). So, the era date serves as a base date for the Serpent Number almanac and it is nested between pre-era and post-era texts. All these elements combined serve as verification that the era date is intended.

III.3 Translation Method

Although large portions of Maya script have been deciphered, many glyphic components remain unknown. In the age of the internet, new decipherments and insights occur so rapidly that they rarely make it to print but rather are shared via personal correspondence, word of mouth or find themselves published in grey literature. At the time of this writing, the final consensus on Classic Maya grammar, verb morphology and spelling rules is still a work in progress and the source of lively, productive debate among Maya epigraphers and linguists (see Houston, Stuart and Robertson 1998 and 2004; Bricker 2000 and 2004; Wald 2007; Lacadena and Wichman 2004; MacLeod 2004; Robertson et al. 2007; Mora-Marín 2010). This current state of flux and debate combined with an ever more rapid discovery of new data, presents a thorny problem for any

translator as to which particular grammar and spelling rules he should employ in his translation. The current work takes a conservative approach, attempting a translation that incorporates a basic consensus of rudimentary grammar rules and well known, time-tested decipherments.

The analysis of epigraphic Mayan typically undergoes three levels: transliteration, transcription and translation, with each level involving a greater interpretation than the last. However, certain preferences do need to be stated on what process of transliteration, transcription and translation will be used, especially on issues of vowel complexity (e.g. vowel length and glottalization; Alfonso Lacadena and Søren Wichmann 2004). Simply put, vowel complexity will not be considered¹⁹. The use of morphosyllables (Houston et al. 2001), a subject of great debate, is also not adopted. Concerning how narrative time within verbal categories is represented in the script, of the two major theories (Houston 1997; Houston et al. 1998; Wald 2000; 2004; 2007) of glyphic grammar, I currently employ Robert Wald's (2007) theory that temporal adverbs on verbs and dates use the deictic enclitic *-i(j)iy* and *-ijy* to structure narrative time. Also, I will follow the practice of showing the preconsonantal /h/ within verbs on the transcription level. Finally, I will follow the habit of not writing a glottalized /b'/ and prefer to write /b/ instead.

In reference to naming numbers, day names, and month names, many epigraphers now refer to these terms by their Classic Period pronunciations. For the sake of clarity and familiarity, this study will refer to all the above by their well known Yucatec equivalents. However within a transliteration or transcription, the periods forming a Long Count will be referred to by their Classic Maya spellings of *k'in*, *winik*, *haab*, *winikhaab*, and *pik*. Again for the sake of clarity, within the commentaries on each passage (and in the general text of the thesis) these same periods will also be referred to by their standard scholarly names of *k'in*, *winik*, *tun*, *k'atun* and *bak'tun* when necessary.

As stated, the analysis of Epigraphic Mayan will undergo three levels:

Level 1

The transliteration of each glyphic block (Fox and Justeson 1984; G. Stuart 1988) is presented with boldface lettering and the constituent parts of individual glyphic blocks are joined by hyphens. Logograms are capitalized while syllabograms are shown in lowercase lettering. All numbers are written using Arabic numerals. Every attempt is made at this level to represent only the glyphs that are visible. Thompson T-numbers

¹⁹ Exceptions will be made in the case of established spellings of names or personal titles (e.g. *Haab*, *Chaak* the rain god or the god *K'awil*).

(Thompson 1962) and more recent Macri Numbers (Macri and Looper 2003; Macri and Vail 2009) are provided whenever a sign is unknown. A question mark relates to a particular glyph that remains undeciphered or is unreadable. Also, words in quotation marks emphasize that the glyph translated is but an approximation of the actual word or phrase, or even a nickname, with no intent at translating the hieroglyph.

Level 2

The transcription is presented with italicized lowercase lettering. Added words, syllables or letters by the translator are enclosed by square brackets []. Also, words in quotation marks emphasize that the glyph translated is but an approximation of the actual word or phrase or even a nickname, with no intent at translating the hieroglyph.

Level 3

The final translation into English is presented in normal lowercase lettering. Words or letters bracketed with parentheses indicate added letters and terms added that aid in translating the passage into a more western style of prose. Again, words in quotation marks emphasize that the glyph translated is but an approximation of the actual word or phrase.

Era Day Texts

III.4 Chichen Itza, Caracol (Structure 3C15), Panel 1, Right Lateral Face

(Q7-R12) — (Figure III.1-5)

Date of Composition: Post Classic.

Era Text: blocks Q7-R12.

Location: Palacio Canton Merida, Yucatan.

Photographs: Ruppert (1935: figs. 164, 166, 167); Harvard 2011 VIA On-line Archive photos: 58-34-20/29860-Peabody Number).

Drawings: Krochock (1988); Ian Graham (in Wagner 1995:Tafel 6); García Campillo (1999:41); Voß (2001:170, fig. 6); Grube et al. (2003: II-6).

References: Morley (1923:262-263); Ruppert (1935:135, 145, Figs. 163, 169); Voß (2001:165); Grube et al. (2003: II-6); Boot (2005a:345); García Campillo (1999:41); MacLeod (2008).

Associated Ruler: *K'ak' Upakal*.

Associated Time Periods: 17th *tun* of *k'atun* 1 *Ajaw* (beginning on 10.2.16.0.1 and closing on 10.2.17.0.0 circa 885-886 AD).

Caracol (Structure 3C15), Panel 1, Right Lateral Face (Q7-R12)

Q7-4 AJAW	R7-u-?
Q8- JEL-?-li-ya	R8-? KUMK'U
Q9- K'AL-li?-ya	R9- k'o-ba
Q10-17-tu-TUN-ni	R10- u-3-11-PIK
Q11- ?-bi-?-ja-T24?-?	R11- ta-1-AJAW
Q12-12-HAAB?	R-12- u-K'AK'-?

Transliteration²⁰

. . . u-? 4 AJAW ? KUMK'U JEL-?-li-ya k'o-ba K'AL-li?-ya u-3-11-PIK 17-tu-TUN-ni ta-1-AJAW ?-bi-?-ja-T24?-? u-K'AK'-? 12-HAAB? . . .

Transcription

. . . *kan ajaw [waxak] kumk'u je[h]l[aj]?-i[ji]y k'o[jo]b k'al-i[ji]y u ox-bolon pik wuklajun tu tun ta jun ajaw ? ? ? u k'ak' lajka' haab? . . .*

Translation

. . . (on) four ajaw (eight) kumk'u after it was changed the altar/pedestal back then, it was (the) binding back then (of), the three-eleven pik (cycle) (to) the seventeenth haab (of) the one lord ? (its) fire twelve (haab?) . . .

Commentary

The Caracol Panel 1 (Figure III.1-4) was found by Morley in 1923 along with an inscribed circular altar that lay within a stylobate niche (Figure III.5a) dividing the upper and lower platform stairway and along the central axis of the building platform (Morley 1923:262-263; Ruppert 1935:135, 145, Figs. 163, 169). The era text of the Caracol Panel (formerly named Caracol Stela 1) is written along the lateral lower, right edge of the monument (Figure III.3). Both the lateral left and right edges are carved with glyphic blocks that began on the top lateral edge. Panel 1's front perimeter edge (Figure II.4) was carved in the form of a serpent that encircles the text (see serpent head located at the lower, left corner edge, and a tail with rattle snake rattles along the right vertical edge) with its belly possibly facing inward toward the main inscription, and its back facing outward toward the lateral sides. The snake's body is marked with cross-hatching, and "half-loops" and its tail with snake rattles. The same markings are identical with those

²⁰ The only discernable part of the right lateral passage starts with the era date followed by the era event that speaks about the changing of the *k'ojob* or altar/pedestal (see Appendix V). In an atypical format, this text was also written as a mirror image (in reversed order). The following transliteration and transcription are arranged so that the text reads in normal fashion from right to left and two columns downward.

found on the intertwined rattle snakes carved on the Caracol's balustrades of the upper and lower platform stairway (Ruppert 1935:fig 59). This could mean that the glyphs written on the lateral border of Panel 1 are symbolically equivalent to the body of a snake (p.c. Falken Forshaw 2009).

Panel 1 contains the last inscription at Chichen Itza that refers to the life of *K'ak' Upakal* in connection with the 17th *tun* of *k'atun 1 Ajaw* that began on 10.2.16.0.1 and closed on 10.2.17.0.0 circa 885-886 AD (García Campillo 1999:40; Voß 2001:165). This 17th *tun* period ending is also recorded on the front of Panel 1 (Figure II.4) at glyph block C5 in connection with *K'ak' Upakal*, and the **T759-ka-ki** (D5) event that may read **PEK?-a(j)-Ø-ki** which can be paraphrased as “called was/invited was/notified was” (Grube et al. 2003:6; Boot 2005:345). Barbara MacLeod (p.c. 2009) states that the root /pek/, in Yucatec can mean “to sound”, “to ring/call out”, “to move” or to “speak out” (Barrera Vásquez 1980:643)²¹. It may mean that *K'ak' Upakal* was “called out,” “spoke out” or “invited out” (Boot 2005a:345).

The era text (Figure III.3) is comprised of a verbal couplet where the first event is the changing of the *k'ojob* or altar/pedestal (Q7-R12). As discussed in Appendix V of this dissertation, the term *k'ojob* seems to denote an altar or pedestal on which a god effigy or *incensario* may stand. The next event is the “binding/recording?” of the 3-11 *Pik* station along with the 17th *tun* of *k'atun 1 Ajaw* Period Ending (Grube et al. 2003:6; MacLeod 2008). In his later years *K'ak' Upakal* very likely acquired the 3-11 *Pik* title, a title encompassing a time span of 3 x 8660 days (MacLeod 2008)²². As MacLeod has noted (2008), this title was bestowed on those fortunate few whose life span overlapped three “Single Stations” comprising of 3 x 8660 days (3 x 23.71 years = approx. 71.13 years) and when a Triple Station (the third station in a span of three single stations) fell within a ruler's reign. Potentially the 3-11 *Pik* title may infer that a king is at least 71 years old when acquiring it. Also, MacLeod (2008) and Grofe (2003) convincingly offer evidence that the 3-11 *Pik* title may relate to an almanac used in tracking the precession cycle of stars by noting that 71.13 years corresponds very close to a “one-day” correspondence in the earth's precession cycle of 70.59 years. If so the 3-11 *Pik* almanac would have used the era date as its “zero base” date from which to track precession (MacLeod 2008:1).

²¹ The root /pek/ “call out” is intransitive, so an /-aj/ suffix in this instance should be a thematic suffix for intransitives, and the /-ki/ is the same /-ki/ one see in 'u(l)-xul-naj-ki on the Chichen Itza 4 Lintels and elsewhere- it is a Yucatek suffix marking an intransitive verb associated with a date or a preceding modal adverb (p.c. MacLeod 2009).

²² This title may be similar to a *k'atun ajaw* title, seeLooper 2002.

In sum, the scribes of the Caracol Panel 1 are recording four events in conjunction with era day-one mythic and two historical: 1) the changing of the *k'ojob*; 2) the 'binding' of the 3-11 *Pik* station (and very likely the acquisition of this title by *K'ak' Upakal* toward the end of his life); 3) the binding of the 17th *tun* of *k'atun* 1 *Ajaw* period celebration that may commemorate the founding of the Caracol by *K'ak' Upakal* and 4) by association, the proposed *pek* event where *K'ak' Upakal* "spoke out" or was "invited out."

There are archaeoastronomical alignments to consider with Panel 1 as well. Studies of the Caracol (Aveni 1980), show alignments of the building's architecture with astronomical events occurring at the local horizon including, "sunset at the equinoxes and sunset on the days the sun passed zenith" (Aveni 1989:244). Panel 1 once sat directly above a stylobate niche (Figure III.5a) dividing the upper platform stairway (Ruppert 1935:136). This niche has an astronomical alignment corresponding to the Zenith passage of the sun (Figure III.5b). The niche has one wall aligned at an azimuth of 292° 54' (22 ° north of west), and faces the position of the setting sun on the solar zenith (Aveni 1980, fig. 89-91; Milbrath 1999:66, fig. 3.1b). Interestingly, the May zenith sunset orientation in the Yucatan coincides with the beginning of the rainy season and the maize planting (Milbrath 1999:66). It is very likely then that this stairway niche could have been used as a platform to observe and later order the sun's path as well as those calendar rituals that forecasted the start of the planting season²³. If the stairway niche was use to observe the setting of the sun then Panel 1's position was also aligned with the zenith passage, so it witnessed the solar event twice a year. Such zenith observations could very well tie into the epic event about of the first solar rise and set on the first day of the new era. So in a very "concrete, physical way" (Aveni 1989:224), architectural space and mythic history are linked to the founding of the Caracol.

The the factors of the Caracol's zenith solar alignments with the stylobate niche and the zenith passage of the sun two days after the 17th *tun* celebration on 10.2.17.0.0 13 *Ajaw* 18 *Yaxk'in*, at the very least, physically tie Panel 1 to the zenith alignment. In addition, Michael Grofe (p.c. 2007) notes that the sidereal position of the lunar node on 10.2.17.0.0 corresponds exactly with the position of the lunar node in the era base year 3114 BC, suggesting that the binding of the 17th *tun* with the era day event offers "a

²³ Aveni (1980:Figures 90-91) also demonstrates that the North East and North West corners of the top Caracol platform align with the Summer and Winter solstices respectively. Such a solar correspondence gives strength to the argument that the sylobate niche alignment with the solar zenith is no mere coincidence.

compelling sidereal rationale for the back-calculation of the era base year” (p.c. Michael Grofe 2007). Lastly, if the above astronomical and mythic correspondences are relevant (and not simply coincidental) the fire-related events recorded on the front of Panel 1 (block A6 and D3), along with *K’ak’ Upakal* and the gathering of so many lords (Panel 1, blocks I3-L6), may relate a gathering of nobles and priests who witnessed not only the founding of the Caracol but celebration of the sun’s passage through the zenith and its calibration with a religious festival, an event that is still recognized and celebrated by Modern Maya (Girard 1995:301-315)²⁴. In this place, myth and architecture seem to focus on the sun’s journey as the “ultimate creative force in the universe” (Aveni 1989:245).

III.5 Caracol (Structure 3C15), Hieroglyphic Band, Fragment 5 (pA1-pB2) —

Figure III.6

Date of Composition: Post Classic.

Era Text: blocks pA1-pB2.

Location: Unknown.

Photographs: Ruppert (1935: fig 337 number 5); Harvard 2011 VIA On-line Archive photos: 58-34-20/33605 (Peabody Number).

Drawings: García Campillo (1999:fig. 2.10).

References: Morley (in Ruppert 1935:276-282); Boot (1997); García Campillo (1999:50).

Associated Ruler: Unknown.

Associated Time Periods: Unknown.

Caracol (Structure 3C15), Hieroglyphic Band, Fragment 5 (pA1-pB2)

pA1-u-PAS

pB1-3-wi-WITZ

pA2-16-YOK’IN-ni pB2-WAK-CHAN-na

Transliteration

u-PAS 16-YOK’IN-ni 3-wi-WITZ WAK-CHAN-na . . .

Transcription

u pas waklajun yokin? ox witz wak chan . . .

²⁴ About the recognition of the zenith Juan Pío Perez noted, “To this day the Indians . . . commenced [their year] . . . from the precise day on which the sun returns to the zenith of this peninsula on his way to the southern regions” (Stephens 1961:280; as cited in Aveni 1989:237).

Translation

its dawning (of) sixteen yok'in (at) three mountain six sky . .

Commentary

Fragment 5 (Figure III.6) comes from inscribed double and single-headed serpent bands that are thought to have surrounded four human figures that once sat in niches atop “monster” masks that adorned the outer wall of the Caracol tower above the medial cornice (Ruppert 1935:276). In all, nineteen blocks were recovered and Morley (in Ruppert 1935:276-282) made a hypothetical reconstruction of these bands based on the size and shape of each stone. The arched bands immediately recall similar glyphic double-headed serpents found at Xcalumk'in, Miscellaneous Text 5 (Graham et al. 1992:197) and the Palenque Cosmic Throne in which the “Cosmic Monster” body is carved with hieroglyphs (Stuart 2003a). None of the Caracol serpent fragments were found set in the outer wall *in situ*, rather they were found in the rubble along the perimeter of the tower and presumably fell from above the above cornice (Morley in Ruppert 1935:284) Therefore, none of the blocks can be reconstructed into complete passages.

Although Fragment 5 carries no era date, it is included into this survey of era statements since it references a pre-era day god and mythic location and it may obliquely refer to the era passage on Panel 1. The Fragment 5 glyphs are written to the left of one of the “serpent heads” and this proximity suggests that the glyphs were meant to start or terminate a passage²⁵. In addition, the stone's exterior borders are framed by a closed square bracket (closed at the left and open on the right), a feature that lends itself to the idea that the passage was meant as an initial phrase. There are two possibilities as to the reading order of the glyph blocks; they can be read in single columns (pA1-pA2-pB1-pB2) or in double columns (pA1-pB1-pA2-pB2). The single column option is chosen here since the majority of the remaining eighteen serpent blocks seem to follow a similar reading order (although Fragment 10 does seem to be read in double columns).

The passage begins with the possessed noun **u-PAS**, “dawn.” What is said to have dawned is a count of some sort as indicated by the numeral 16. The glyph A2 lends itself to being read as *tun* with a */-ni/* suffix (García Campillo 2007:50). Yet, the main sign looks nothing like the T528 “*kawak*” glyph rather it has more the appearance of an “animal head” facing to the left and possessing a mouth and large eye orbit. An

²⁵ On other known serpent bands, the heads frame the start and end points of a passage-see the Palenque's “Cosmic Throne” as a good example (Stuart 2003a).

alternative reading for this glyph is the 16 *Yok'in* a nebulous god with a dog-like head and large orbit who shows up at *k'atun* celebrations in the Classic Period and on pre-era day accounts on pages 61 and 69 of Codex Dresden (Callaway 2009). The event takes place at the “three mountain six sky” place. The “six sky” collocation is a well known mythic locale where it is said era day gods hail from (as attested on the “*Yax Wayib*” Mask and Quirigua Stela C)²⁶. Therefore, the 16 *Yok'in* god and the “three mountain six sky” place could serve as yet another reference tying the Caracol to era day history. Still this is not enough evidence to claim that the inscription refers to era date so its affiliation as an era day passage remains in doubt.

The Fragment 5 passage corresponds to like-in-kind notables on other Serpent Block glyphs. Alexander Voß’ recent study of additional phrases and nominal titles on the serpent bands points to similar references to gods and prophecy in connection with the Caracol (Voß 2001:160). According to Voß, Block 8 records the name **K’UH aj-kan-na tz’i-tz’i-NAL**. Both of these names can be linked to same title that a certain *Itza Bolon K’awiil* carries mentioned in the final passage of Panel 1 (Blocks N3-M4) read as **aj-kan-na tz’i-tz’i-NAL**. Voß notes that *Aj Kan* in Colonial Yucatec is glossed as “*el que cuenta alguna cosa, diestro en contarla*” (Barrera Vásquez 1980:291) and that it refers to a description of a profession or office (Voß 2001:160). Finally, Voß also states that it is probable that the lexeme *tz’iitz’* may well have described events the related to the occult and translates as enigmatic qualities like those found in auguries, oracles and prophecies (Voß 2001:160)²⁷. Tentatively, we can postulate that the Caracol was a building related to the divination and that the *Itza Bolon K’awiil* is the orator and the prognosticator of the *tz’iknal* or the Caracol that has the function to announce and proclaim the prognostications based on astronomical observations (Voß 2001). The Fragment 5 mention of a custodial god of time and locale are in accord with era founding events already discussed on Panel 1 and reinforce similar texts and solar zenith alignments that implicate the Caracol structure as a device of prognostication and calendar reckoning.

²⁶ A little known Palenque terracotta sculpture may be a depiction of this Three Mountain Six Sky place. The sculpture base displays three **WITZ** mountain masks; standing atop is a human figure emerging from a celestial niche who is flanked by two more human figures (hero twins) possessing blowguns (one of which is aiming) at a now eroded celestial bird (see on-line, Harvard VIA Photo 58-34-20/42250).

²⁷ Barbara MacLeod (p.c. 2009) pointed out nearly ten years ago that the *Kan Tz’iknal* from Panel 1 is mentioned in Landa’s *Relación de Las Cosas de Yucatán* in relation to an augury for the Year Bearer Muluk: “The second letter, or Muluc, marked the East, and this year had as its augury the Bacab called Cansinal, Chacal-bacab, Chac-pauhtun, Chac-xibchac.” Gates (1978:61).

III.6 Coba Stela 1 (M1-P5) — Figure III.7-12

Date of Composition: Late Classic.

Era Text: blocks M1-P5.

Location: *in situ* Coba, Yucatan, Platform IX, Macanxoc Group A.

Photographs: Morley (1927:fig. 12); Thompson et al. (1932:Plate 2); Graham et al. (1997:8:23); Harvard VIA 2011: 58-34-20/31196 (highest overall resolution), 58-34-20/31224, 58-34-20/31224.1, 58-34-20/32573, 58-34-20/32572 (Peabody Numbers); Schele (2011b).

Drawings: Schele (1992:121); Freidel et al. (1993:62); Graham et al. (1997b:8:22).

References: Morley (1927:62); Thompson et al. (1932:182); Graham et al. (1997b:17-25); Schele and Miller (1986:320-321); Schele and Freidel (1990:430-431 and 430);

Gronemeyer 2004; Bíró et al. (2008); Stuart (2010a); Stuart (2011a:232-239).

Associated ruler: Coba Ruler 2 (Bíró et al. 2008)/Ruler B Stuart (2010a).

Associated Time Periods: After the “Grand Long Count” (Stuart 2011a:231) is a second Long Count of 9.12.0.0.0 10 Ajaw 8 Yaxk’in (Stela 1, blocks P6-P14).

Coba Stela 1 back (M11-P5)

M1- ?	N1-13 [20 ²¹ tuns]
M2-13 [20 ²⁰ tuns]	N2-13 [20 ¹⁹ tuns]
M3-13 [20 ¹⁸ tuns]	N3-13 [20 ¹⁷ tuns]
M4-13 [20 ¹⁶ tuns]	N4-13 [20 ¹⁵ tuns]
M5-13 [20 ¹⁴ tuns]	N5-13 [20 ¹³ tuns]
M6-13 [20 ¹² tuns]	N6-13 [20 ¹¹ tuns]
M7-13 [20 ¹⁰ tuns]	N7-13 [20 ⁰⁹ tuns]
M8-13 [20 ⁰⁸ tuns]	N8-13 [20 ⁰⁷ tuns]
M9-13 “ALAWTUN”	N9-13 “K’INCHILTUN”
M10-13 “KALABTUN”	N10-13 “PIKTUN”
M11-13 PIK?	N11-0 WINIKHAAB
M12-0 HAAB	N12-0 WINIK
M13-[0] K’IN	N13-4 AJAW
M14-“G9”	N14- t’i-HUN-na
M15-3-JUL-?-?	N15-“Glyph X”
M16- u?-ch’o?-K’ABA	N16-10-?

M17- K'AL-10

M18- JEL-ja

M19-TZUTZ

M20-7?-JGU

N17-8 KUMK'U

N18- k'o-ba

N19-13-PIK

M20- YAX SUTZ'-?

Transliteration

13 [20²¹ tuns], 13 [20²⁰ tuns], 13 [20¹⁹ tuns], 13 [20¹⁸ tuns], 13 [20¹⁷ tuns],
13 [20¹⁶ tuns], 13 [20¹⁵ tuns], 13 [20¹⁴ tuns], 13 [20¹³ tuns], 13 [20¹² tuns],
13 [20¹¹ tuns], 13 [20¹⁰ tuns], 13 [20⁰⁹ tuns], 13 [20⁰⁸ tuns], 13 [20⁰⁷ tuns],
13 [“ALAWTUN”], 13 [“K'INCHILTUN”], 13 [“KALABTUN”], 13 [“PIKTUN”],
13 PIK, 0 WINIKHAAB, 0 HAAB, 0 WINIK, 0 K'IN, 4 AJAW “G9” t'i-HUN-na 3-
JUL-?-? “Glyph X” u?-ch'o?-K'ABA 10-? K'AL-10 8 KUMK'U JEL-ja k'o-ba
TZUTZ 13-PIK 7?-“Jaguar God of the Underworld” YAX SUTZ'-? . . .

Transcription

. . . *oxlajun pik, mih winikhaab, mih haab, mih wini, k mih k'in, kan ajaw “G9” t'i hun*
ox jul-? “Glyph X” u ch'o[k] k'aba 30 uh waxak kumk'u je[h]l[a]j k'o[jo]b tzutz[uy]
oxlajun pik wuk-“JGU ” yax sutz' . . . ?

Translation

. . . 13 pik, zero winikhaab, zero haab, zero winik, (and) zero k'in, (on) four ajaw, “G9”
edge (of the) book, since the 23 day moon arrived (and the) “nth” lunation was
completed, “glyph x” was its young name (counted as a) 30 (day moon on) 8 k'umk'u
was changed/renewed back then (the) altar/pedestal, was finished (the) thirteen piks,
(together with) seven “jaguar god of the underworld” (and the) blue/green bat . . .

Commentary

Stela 1 (Figure III.7-10) is part of a group of monuments (the others being Stela 2, 3, 4, 5, 6, 7 and 8) that are part of *Grupo Macanxoc* or Group A at Coba (Morley 1927:62; Thompson et al. 1932:182; Graham et al. 1997:17-25; Gronemeyer 2004). Stela 1 is carved on all four sides with text and images. It is carved from a limestone slab that is now badly weathered, making the majority of the glyphs very difficult to read. All of the monuments from Group A were dedicated between 9.9.0.0.0 (613 AD) and 9.12.10.5.12 (682 AD) reaching as far as 9.13.0.0.0 (692 AD); of all the recorded dates in Group A, Stela 1 carries the highest surviving historical Long Count and was most likely the last in the series to be erected (Bíró et al. 2008; Gronemeyer 2004). It is thought that Ruler 2 (with an undeciphered name that includes the godly name *k'awiil*) commissioned Stela 1

as well as 4, 5, 7, 8, and possibly Stela 3 (Bíró et al. 2008). In a recent analysis of Ruler 2's inscriptions Péter Bíró and colleagues noted the following:

Ruler 2's accession was retrospectively mentioned on Stela 4 where a distance number of 12.12.11 precedes the well-known expression *k'a[h]laj hu'n tu b'aah* or 'the headband was tied on his head.' Peter Mathews (n.d.) reconstructs this date as 9.11.0.5.9 4 *Muluk* 17 *K'ayab* (653) . . . It is clear that he was a 4 *Winikhaab'* *Ajaw* or between 60 and 80 years old which is confirmed by his use of the 3-11-*pik* (Looper 2002) title indicating his most probable age around 72 in 672 (Stela 1:Back P19-P20). Therefore his birth could have been around 600 thus he was a mature man when his accession occurred in 653. Just as Ruler 1, Ruler 2 also used the prestigious *kalo'm te'* title, and apart from that he had the emblem glyph **IK'/EK'-HAAB'-HO' AJAW** or *ik'/ek' haab' ho' ajaw* (Stela 1: Right Side W22; this identification was made by Nikolai Grube in 1992). As Alfonso Lacadena noted (personal communication 2007) this emblem glyph is the antecedent of the Late Postclassic name of the eastern maritime region of the Yucatan peninsula recorded in the Colonial sources as *Ekab* (Bíró et al. 2008:12-16).

As a four *winikhaab ajaw*, Ruler 2 enjoyed a long life that stretched into his 4th *k'atun* (60—80 years). On the back of Stela 1 (O6-P19), it is written that Ruler 2 acquires the 3-11 *Pik* title in conjunction with the 9.12.0.0.0 Period Ending²⁸. As discussed previously, the 3-11 *Pik* lexeme is a title (Looper 2002) and represents a time span of 3 x 8660 days or about 71 years (MacLeod 2008)²⁹.

Stela 1 (Figure III.10) contains by far the most elaborate "Grand Long Count" (Stuart 2011a:231) to record the era date (Thompson et al. 1932:182; Morley 1937-1938:316). The Long Count shows 20 cycles above a *k'atun* with each period carrying a numerical coefficient of 13 (M1-M13). The numbers 13 and 20 replicate the same symmetry found within the 260 day sacred calendar the days of which are comprised of factors of 13 and 20 equaling 260 days; the single unit of the highest cycle equals 20²¹ x

²⁸ The 12th *k'atun* passage, directly follows the era day remembrance containing an elaborate "Grand Long Count" (M1-N19). The format of an era day passage segueing into a Period Ending celebration that also records the acquisition of a 3-11 *Pik* title, is similar to a sequence found on Chichen Itza's Caracol Panel 1, where the era day text links or "binds" *K'ak' Upakal's* 3-11- *Pik* title with the "17th *tun* of *k'atun* 1 *Ajaw*" (MacLeod 2008).

²⁹ As MacLeod has noted (2008), this title was bestowed on those fortunate few whose life span overlapped three "Single Stations" comprising of 3 x 8660 days or 71.13 years) and when their reign overlapped the final third station (in a span of three single stations) (see prior reference to the 3-11 *Pik* title on Chichen Itza's Caracol Panel 1.

360 which in turn equals 2.0670522×10^{27} tropical years (Freidel et al. 1993:63). The span of time conceived by such a Long Count is so large that it dwarfs the estimated age of our own cosmos (approximately 14 billion years); the highest of these Coba Stela 1 cycles to change from 13 to 1 will take slightly under 42 nonillion years or 41,341,050,000,000,000,000,000,000,000 years (Schele and Friedel 1990:430). Only three other instances record the era date in a similar fashion: the right side of Coba Stela 5, the opening Long Count on Coba Stela 28.

The extraordinarily vast time depth of Stela 1 Long Count is not its only remarkable feature. It also contains an elaborate passage detailing era day events over sixteen glyphic blocks, starting at glyph block M18 and running through to P5. Following the end of the era day passage is another Initial Series date of 9.12.0.0.0 10 *Ajaw* 8 *Yaxk'in* (July 1, 672) in blocks P5-P14 which brings the reader into firm historical time (Gronemeyer 2004). Due to weathering of the inscription most of these blocks are barely discernable. Only blocks M18-N19 can be read with any real assurance (Figure III.9): they replicate the standard era day passage relating the changing of the “altar/pedestal” and the completion of the 13th *bak'tun*. Yet by looking at early photos (Thompson et al. 1937:Plate 2), more details are forthcoming. Following the *tzutz* 13 *pik* collocation at blocks M19-N19, are two head variants of what are very likely two distinct god names. Block M20 displays the possible numeral seven/eight followed by a head with these features: a large “Roman” nose, square-shaped eye with and eye cruller underneath, a jaguar ear (carved incidentally around a protruding shell in the limestone of the same shape) and a “fish barbel” curling out of the corner of the mouth (Figure III.11a). This type of nose, squarish orbit, and mouth barbel are shared features of the Sun God (Thompson 1970:236). The addition of the eye cruller and the jaguar ear, mark this god as a candidate for the “Jaguar God of the Underworld” who is associated with the night sun (Thompson 1970:292-93) and fire rituals recorded in the Initial Series (Grube 2000) and is the face commonly featured on *incensario* stands used to burn fire or incense (Carrasco 2005). Also the prefixed numeral seven as a personified deity, is the portrait of the “Jaguar God of the Underworld” (Thompson 1970:fig. 24). The next glyph block at N20 (Figure III.11b) is a possible T16 **YAX** sign prefixed to a head possessing a large circular eye orbit and an ear tip with sharp angular cut (indicative of a bat or fish ear). The Graham (1997b:22-23) drawings and photos, record one more distinguishing feature—the tip of a possible upturned bat nose. These traits are characteristic of a *sutz'* T756 leaf-nosed bat head (Thompson 1970:108; Boot 2009c). The “Jaguar God of the Underworld”

and the bat god are two deities appearing on Kerr Vases K2796 and K7750, with the latter vase displaying a full portraits of both the “Jaguar God of the Underworld” (the upper right-most god) and the *Sutz’* God (left-most god in the lower row) seated before the throne of God L (Figure IV.3). The “Fiery-Mouth Jaguar” and a Blue-Green Bat (Figure VI.1) are two gods that play important roles in renewing major calendar cycles as is indicated on Tortugero Monument 6 (Gronemeyer and MacLeod 2010:59; Callaway 2011). So in the case of the close of the 13th *Bak’tun* on Coba Stela 1, the presence of the “Jaguar God of the Underworld” and the Blue-Green Bat seem necessary for transition of the new era to occur.

III.7 Coba Stela 5 (P1-Q1) (pA1-pA13) — Figure III.13

Date of Composition: Late Classic.

Era Text: right side, blocks pA1-pA13.

Location: in-situ Coba, Yucatan, Macanxoc Group A, found on a low platform at the base of a stairway on the west side of Structure A-3.

Photographs: Graham et al. (1997b:8:26).

Drawings: Graham et al. (1997b:8:36).

References: Graham et al. (1997b:8:33-36); Gronemeyer (2004); Bíró et al. (2008); Stuart (2010a).

Associated ruler: Coba Ruler 2.

Associated Time Periods: Opening Long Count on front side of Stela 5 is 9.11.10?.0.0 11 *Ajaw* [18 *Ch’en*].

Coba Stela 5 Right Side (pA1-pA13)³⁰

pA1- ?	pB1-13 [20 ²¹ tuns]
pA2-13 [20 ²⁰ tuns]	pB2-13 [20 ¹⁹ tuns]
pA3-13 [20 ¹⁸ tuns]	pB3-13 [20 ¹⁷ tuns]
pA4-13 [20 ¹⁶ tuns]	pB4-13 [20 ¹⁵ tuns]
pA5-13 [20 ¹⁴ tuns]	pB5-13 [20 ¹³ tuns]
pA6-13 [20 ¹² tuns]	pB6-13 [20 ¹¹ tuns]
pA7-13 [20 ¹⁰ tuns]	pB7-13 [20 ⁰⁹ tuns]
pA8-13 [20 ⁰⁸ tuns]	pB8-13 [20 ⁰⁷ tuns]
pA9-13 “ALAWTUN”	pB9-13 “K’INCHILTUN”
pA10-13 “KALABTUN”	pB10-13 “PIKTUN”
pA11-13 PIK?	pB11-0 WINIKHAAB
pA12-0 HAAB	pB12-0 WINIK
pA13-[0] K’IN	

Commentary

Stela 5 is the second of three monuments bearing a “Grand Long Count” (Figure III.13). As David Stuart (2010b) points out, due to an error in restoration blocks pA12-pB13 were inappropriately spaced too wide apart creating an additional row to be added between rows 12 and 14; this error of additional space was carried over into the Graham and Von Euw drawing (1997b:34); therefore row 13 should be eliminated and blocks pA12 and pB12 merged. Once corrected, its apparent the inscription is a Long Count similar to that on Stela 1 displaying twenty periods above the *bak’tun*, with all higher periods bearing coefficients of thirteen. The *bak’tun* sign is seemingly that of a conch shell. No explanation can be given for this odd variant of the sign since it is unique and does not occur elsewhere in the corpus (Stuart 2010b). Only the general outlines of *haab* and *winik* glyphs survive but portions of their coefficients do appear, leaving no doubt that each bears a coefficient of zero. The Long Count date is transcribed numerically as: 13.13.13.13.13.13.13.13.13.13.13.13.13.13.13.13.13.13.0.0.0.0 [4 Ajaw 8 Kumk’u]

³⁰Being that there is a lack of an era day passage, no transcription or translation will be offered but the column and row designations are noted. Glyph block pA13 and pB13 in the Graham drawing should be merged with blocks pA12 and pB12; due to an error in restoration blocks pA12-pB13 were inappropriately spaced apart (Stuart 2010b). A corrected drawing has been made by David Stuart at: <http://decipherment.wordpress.com/2010/04/23/the-era-date-on-coba-stela-5/>.

It is very likely that the inscription continued to the left side of the stela, recording of era day events. Unfortunately, the face of the left side is completely eroded, leaving not a single trace of writing.

III.8 Coba Stela 28 (A1-C7) — Figure III.14-17

Date of Composition: Late Classic.

Era Text: blocks A1-C7?

Location: *in situ*, Coba Yucatan, Group D complex *Conjuntos de las Pintras*. It stands at the base of a long rectangular platform designated as Structure D-25.

Photographs: see current work Figure III14-III15.

Drawings: CMHI Archives, Harvard (unpublished).

References: Graham et al. (1997b); Gronemeyer (2004); Bíró et al. (2008).

Associated ruler: *Kalomte' Chan K'inich?*

Associated Time periods: circa 9.17.10.0.0 12 *Ajaw* 8 *Pax* (from Stela 20); 9.16.7.2.8 9 *Lamat* 6 *Xul* (from Stela 16).

Coba Stela 28 (A1-E1)³¹

A1-ISIG	B1-ISIG
A2-ISIG	B2-ISIG
A3-13 [20 ²¹ tuns]	B3-13 [20 ²⁰ tuns]
A4-13 [20 ¹⁹ tuns]	B4-13 [20 ¹⁸ tuns]
A5-13 [20 ¹⁷ tuns]	B5-13 [20 ¹⁶ tuns]
A6-13 [20 ¹⁵ tuns]	B6-13 [20 ¹⁴ tuns]
A7-13 [20 ¹³ tuns]	B7-13 [20 ¹² tuns]
A8-13 [20 ¹¹ tuns]	B8-13 [20 ¹⁰ tuns]
A9-13 [20 ⁰⁹ tuns]	B9-13 [20 ⁰⁸ tuns]
A10-13 [20 ⁰⁷ tuns]	B9-[13] “ALAWTUN”
A11-13 “K’INCHILTUN”	B11-13 “KALABTUN”
A12-13 “PIKTUN”	B12-13 PIK
A13-0 WINIKHAAB	B13-0/10? [0 HAAB]
A14-0 WINIK	B14-[0 K’IN]

³¹ Due to a lack of an era day passage, no transcription or translation will be offered but the glyph blocks are noted with column and row designations.

A15-4 [AJAW]	B15-[G9?]
A16-[t'i HUN-na?]	B16-[LUNAR?]
C1-[LUNAR?]	D1-[LUNAR?]
C2-[LUNAR?]	D2-8 KUMK'U
C3-[EVENT?]	D3-?
C4-?	D4-?
C5-12'?	D5-?
C6-u-?	C6-?
C7-	

E1-JO' [AJAW/]-? F1-u-?

Commentary

Coba Stela 28 (Figure III.14 and III.16-17) is part of Group D, named *Conjuntos de las Pinturas*. It stands at the base of a long rectangular platform designated as Structure D-25 (Graham et al. 1997b). The surrounding buildings display monuments that include Stelae 15, 16, 20, 21, 24, 26, 27, 28, 29, 31 and various hieroglyphic ball court panels (Graham et al. 1997b, Gronemeyer 2004). The architecture of Group D comes from the last settlement period, so a Late Classic and Early Post Classic dating has been ascribed to its sculptured stelae (Gronemeyer 2004a). As Péter Bíró (et al. 2008) states Stelae 16 and 20 were dedicated in 758 and 780 respectively by the same ruler called *Kalomte' Chan K'inich* (for dates see also Gronemeyer 2004). Therefore by association then, Stela 28 most likely falls near to the same Late Classic date of Stela 16 and 20. Although the inscriptions on Stela 28 are badly weathered, outlines of glyphic blocks are legible displaying some internal details. Stela 28 opens with another enormous Long Count with all twenty periods above the *k'atun* possessing coefficients of the number 13. On-site inspection of this monument in 2010 verified that block B11 reads 13 *Kalabtun* (with a **TZUTZ** clasped hand and tassel sign as a superfix over the **HAAB** logograph) thereby allowing the reader to anchor the position of the other remaining time periods and assign values to all (Figure III.15). It is also important to note that the first four glyph blocks (A1-B2) compose a large Initial Series Introductory Glyph (ISIG). This is the only instance where such a Grand Long Count begins with the Introductory Glyph. The Grand Long Count and Introductory Glyph together on one monument dispel the notion that the ISIG somehow acts a substitute for the Grand Long Count. The 4 *Ajaw* day name is most

likely located at block A15 while the 8 *Kumk'u* month name is at block D2. The era day event then was most likely recorded at blocks C3-D3 directly following the month name as it does on Stela 1. It should be noted, however, that the *haab* period at block B13 seems to carry a coefficient of ten. Nevertheless, due to the erosion of the text the ten could be a weathered zero coefficient.

The Stela 28 text looks as if it is a mirror of the same era text on Stela 1. If so, Stela 28, block E1 and Stela 1, block O3 carry the same numeral 5 coefficient and may name the ruler *Ihk' Haab Jo' Ajaw* (as seen on Stela 1: Right Side, block W22).

III. 9 Copan Stela 23 (G7-I2) — Figure III.18

Date of Composition: Late Classic.

Era Text: blocks G7-I2.

Location: The northeast corner of the Copan Valley near the village Santa Rita, Honduras. The monument was lost some time after Morley visited the site (Morley 1920:146-149).

Photographs: non-existent.

Drawings: Morley (1920:148, fig. 26a and c).

References: Morley (1920:146-149); Martin and Grube (2000:201); Carter (2008:29-32); Grofe (2010).

Associated ruler: Copan Ruler 12, *K'ak' U Ti' Witz' K'awil* (Carter 2008:2).

Associated Time Periods: Opening Long Count 9.10.18.12.8 8 *Lamat* 1 *Yaxk'in* and a reference to 9.11.0.0.0 12 *Ajaw* 8 *Kej*.

Copan Stela 23 (G7-I2)

G7-4 AJAW

F8-8 KUMK'U

G8- TZUTZ-ya

F9-13-?

G9-?

H1- YAX-“THREE-STONE”-NAL

I1- JEL-le? k'o-ba

H2-?-ya

I2-?

Transliteration

. . . 4 AJAW 8 KUMK'U TZUTZ-ya 13-? ? YAX-“THREE-STONE”-NAL JEL-le?
k'o-ba ?-ya ? . . .

Transcription

. . . *kan ajaw waxak kumk'u tzutz[u]y oxlajun [pik] yax-*“three-stone”-*nal jel k'o[jo]b ?-ya (god title?) . . .*

Translation

. . . (on) four ajaw eight kumk'u it was finished (the) thirteen piks (at?) the new “three-stone” place, it is the altar/pedestal changing (god title?) . . .

Commentary

Stela 23 (Figure III.18) was erected by Copan Ruler 12, known as “Smoke Imix” (Martin and Grube 2000:201) whose name has more recently been translated as *K'ak' U Ti' Witz' K'awil* (Carter 2008:2), the eleventh successor of *K'inich Yax K'uk' Mo'*, and the possible father of, *Waxaklajun Ub'ah K'awiil*. Stela 23 is part of a program of outlying monuments (the others being Stela 2, 3, 10, 12, 13, 14, 19 and the altar of Stela 13) which Ruler 12 erected in celebration the 9.11.0.0.0 Period Ending (Carter 2008:2)³². All of these monuments are part of a single story about celebrations and the ceremonies in which Ruler 12 conducted or participated in on the day of, and leading up to, or shortly after the 11th *k'atun* (Carter 2008:3).

Stela 23 was found by Morley (1920:146) at the secondary site of Santa Rita located about 7.5 miles (12 km) northeast of the valley. Morley estimated that the stela had been broken into five separate parts— three of which were built into the walls of the *cabildo* at Santa Rita. No photos of the inscription exist and Morley's drawing of the three salvaged parts is the only rendering of Stela 23 inscription. This is most unfortunate since the monument has an extended era day passage with added details that Morley was unable to draw due to his unfamiliarity with non-calendrical glyphs. Even so, enough of the inscription exists to see a very clear calendar round of 4 *Ajaw* 8 *Kumk'u* followed by **YAX-“THREE-STONE”-NAL JEL-le? k'o-ba**. The 11th *K'atun* Calendar Round date is recorded on Stela 23 at the very end of side C and the beginning of side A as 12 *Ajaw* 8 *Kej*. Finally, it is interesting that the mention of the “three-stone place” occurs before the *jel* era event verb and not after it as is normally the case with Late Classic era day inscriptions.

It is clear from the text that Copan scribes are directly connecting the historical 11th *k'atun* celebration to the era base as they do with other *k'atun* celebrations. Grofe (2010) notes further that the coupling of the era date with the 11th *k'atun* may signal an even

³² Stela 13 and 14 can not be tied to a particular *K'atun* ending.

greater astronomical reality; the Copan base-line to which the hilltop Stelae 10 and 12 are aligned (Stela 23 is also within the same monument program), indicates the horizon point where the central fire in the “Three Hearthstones” in the Orion constellation rises, as well as the sunrise position of the sun on 9.11.0.0.0. If these alignments are not simply coincidental, then Grofe (2010) states that the celebration of the 11th *k’atun* and its connection to the era base date are even more significant. Grofe (2010) also points out the Long Count of 9.11.0.0.0 is the earliest date in which the era event records the “changing of the altar/pedestal” episode in conjunction with the 13th Bak’tun so the idea that Copan scribes are the very first to promote this myth leads to the intriguing possibility that myth was codified at Copan and later dispersed to other kingdoms.

III.10 Copan Stela J, West Side (p23-p29) — Figure III.19-27

Date of Composition: Late Classic.

Era Text: west side, blocks p17-p21? and p23-p29?

Location: *in situ* Copan Ruins, Honduras.

Photographs: Maudslay (1889-1902 Plate 66a, 66b 67a, 67b); Harvard VIA Archives 58-34-20/29546 (Peabody Number).

Drawings: Maudslay (1889-1902); Thompson (1944a); Morley (1975:Plate 15); Schele and Grube (1990); Schele andLooper (1996); Schele (2011a).

References: Thompson (1944a); Schele and Grube (1990); Morley (1975:191-192); Schele andLooper (1996).

Associated Ruler: *Waxaklahun Ubah K’awiil*.

Associated Time Period: Opening Long Count 9.13.10.0.0 7 *Ajaw* 3 *Kumk’u*.

Copan Stela J, West Side (p23-p29)

p23-TZUTZ-yi-ya

p24-13 PIK

p25-ya-?-T1078/“FLINT-FACE”-la

p26- u-“HAND”-GI-mi

p27- u-ti-ya

p28- JO’-NIK-TE’

p29- je-na

Transliteration

. . . TZUTZ-yi-ya 13 PIK ya-?-T1078/“FLINT-FACE”-la u-“HAND”-GI-mi u-ti-ya
JO’-NIK-TE’ je-na . . .

Transcription

. . . tzutzu[u]y-i[ji]y oxlajun pik ya-?-T1078/“flint- face” -la u- “hand” -GI-mi u[h]t-
[iji]y jo’ nikte’ jena . . .

Translation

. . . were finished thirteen piks back then, T1078/“flint-face” (by) GI, it happened back
then (at the) five nikte’ jena . . .

Commentary

On west side of Stela J (Figure III.19-21) there are two a very prominent **TZUTZ-yi-ya 13 PIK** statements meaning “*finished 13 pik*” (blocks p17-p18 and p23-24).

Previous researchers dismissed these passages as relating to the era base and instead see them acting more as a Distance Numbers linking a historical date to dates far into the mythic past (Schele and Grube 1990). Looking into this inscription in the light of what is known of other era day passages (especially the second passage, blocks p23-p29), there is good evidence that the era base date may be intended— complete with the mention of an era day god and sacred locale.

First, a look at the opposite side of the stela (east face) orients the reader to the historical events recorded (Figure III.22-23). Stela J, east side presents a unique challenge in its reading order in that the glyphs are inter-woven into the warp-and-weft design of a palm mat (Morley 1975:191-192). Thompson (1944a) initially deduced the correct reading order of the text by following the dates and Distance Numbers (Figure III.23); Schele and Grube (1990) and Schele andLooper (1996) later revealed the basic historical events and players behind each passage:

Stela J, East Side— A Basic Summary

Passage I- (blocks 0-16) 9.13.10.0.0 7 Ajaw 3 Kumk’u

A Long Count of 9.13.10.0.0 7 Ajaw 3 Kumk’u (written with an 8 Kumk’u date) followed by Lord of the Night, Lunar cycles and an 819 Day Count (Distance Number 4.4) 9.13.9.13.16 1 Kib 19 Mak is the 819 day station (south/yellow)

Passage II- (blocks 17-30) 9.0.0.0.0 8 Ajaw 13 Kej

A subtracted Distance Number of 13.10.0.0 from the opening Long Count to (9.0.0.0.0 8 Ajaw 13 Kej) when *K’inich Yax K’uk’ Mo’* the Copan founder

celebrates the 9th *bak'tun* ending with a “taking of the *K'awiil*”; this is followed by numerous gods and a mention of the lineage house *Wite' Nah*.

Passage III (blocks 31-38) 9.9.14.17.5 6 *Chikchan* 18 *K'ayab*

The first part of the text is eroded away but most likely it is a Distance Number counting forward from the 9th *bak'tun* to the accession of “Smoke Imix” (the possible father of *Waxaklahun Ubah K'awiil*). The date here is [9.9.14.17.5 6 *Chikchan*] 18 *K'ayab*

Passage IV (blocks 39-48) 9.13.3.6.8 7 *Lamat* 1 *Mol*

Here a Distance Number of 6.11.12 is subtracted from the opening Long Count of 9.13.10.0.0 7 *Ajaw* 3 *Kumk'u* to arrive at [9.13.3.6.8] 7 *Lamat* 1 *Mol* the accession date of *Waxaklahun Ubah K'awiil* who is receiving the *Yax K'uk' Mo'* emblems?

The basic chronology is as follows:

9.0.0.0.0 8 <i>Ajaw</i> 13 <i>Kej</i>	9 th <i>bak'tun</i> is celebrated by <i>K'inich Yax K'uk' Mo'</i> with taking of the <i>k'awiil</i> scepter
9.9.14.17.5 6 <i>Chikchan</i> 18 <i>K'ayab</i>	accession of “Smoke Imix”
9.13.3.6.8 7 <i>Lamat</i> 1 <i>Mol</i>	accession of <i>Waxaklahun Ubah K'awiil</i>
9.13.9.13.16 1 <i>Kib</i> 19 <i>Mak</i>	819 Day Count
9.13.10.0.0 7 <i>Ajaw</i> 3 <i>Kumk'u</i>	opening Long Count of mon. dedication

Copan Stela J, West Side

The reading order of the west side is even more of a woven riddle (Figure III.21). The texts follow a warp-and-weft pattern of what looks to be representations of cloth bands. The sculptor was keen to indicate in the carving the inter-lacing of these bands at the corners where two cloth bands overlap. Knowing how these bands are overlaid gives a clue as to the lineal reading order of the glyphs over each band. Since some bands are disconnected from all the rest so one must then look syntax rules of epigraphic Mayan (date-verb-object-subject reading order) to deduce the direction of the passage. Godly portraiture is present as well. The bands along with facial features form a visage of the so called “*Tzuk* God” (the T1017 glyph a head-variant of the T24 sign) who has direct links to the polished surface of green jade (Callaway 2006:92-102). With the reading order deduced, the west side and shows a dizzying array of “time travel” counts and calendar rounds that are of a similar pattern of deep time counts found on other era day monuments.

What is the reading order of this west face inscription and where does it indicate a possible era day passage? The easiest way to grasp the reading order is to establish the calendar count and then overlay that logic to the warp-and-weft of the cloth-like lines on which the inscriptions are placed. The obvious day to start with is the 7 *Ajaw* 3 *Kumk'u* (glyphs p36 and p38) which comprise the Calendar Round related to the initial Long Count on the east side of the stela (9.13.10.0.0) From this Long Count subtract the Distance Number 12.12.0.0 (glyphs p30-p33) and arrive at [9.0.18.0.0] 1 *Ajaw* [3 *Mol*] with the 1 *Ajaw* located in the upper left corner of the inscription (p1). The 1 *Ajaw* anchors the reading and from it, one can follow the weave of the lines (looking closely at how corners of the cloth turn and overlap) and logic of the phrasing. So with all these factors in mind, I read the inscription as follows:

Passage I (blocks p1-p10) [9.0.18.0.0] 1 *Ajaw* [3 *Mol*]

The passage reads in a u-shaped fashion (following the cloth-like pattern here) starting with the 1 *Ajaw* then **u-ti-ya** and another *Tzolk'in* date (with coefficient eroded). The event happens in a place called **u-wa-ba-ya wa-ba-ya** and it is overseen (**u-KAB'-ji**) by *Yax K'uh Ajaw*. What is the significance of the 18th *tun* ending referred to in the Long Count? It could relate to the eighteen named *tun* periods listed on the north and south side of the monument (only 16 of these names survive yet there seems to be enough room for mention of the 17th and 18th *tun*).

Passage II (blocks p11-p16) [9.0.18.0.0] 1 *Ajaw* [3 *Mol*]

Glyphs p11-p14 are eroded (except for a *k'al? ajaw* for “20? ajaw”) but fortunately the scribe in mid- passage reiterates the 1 *ajaw tun* ending (p16).

Passage III (blocks p17-p22) 13.0.0.0.0? [4 *Ajaw* 8 *Kumk'u*?]

A first of two *tzutzuy 13 pik* statements is stated (blocks p17-p18). Previously, Schele and Grube (Schele and Grube 1990) thought that this block read **14 PIK** but the intended value is **13 PIK**. A comparison of the Maudslay photos and the Annie Hunter drawing to Linda Schele's drawing of the same text (as well as and photos taken by the author in 2010; see Figure III.25) reveal that Schele misdrew the right-most fourth dot in the numeral coefficient 14 (block p18); the fourth dot is actually part of a rounded loop belonging to the /**ya-**/ superfix of the accompanying collocation located directly to the right (present in the Maudslay Stela J photo and Annie Hunter drawing— see glyph p18). Therefore, **13 PIK** is the intended time period and not **14 PIK**. The glyph following the **13 PIK** is quite

possibly another **T1078/“Flint-Face”** with a **ya-** superfix (p.c. Michael Grofe 2010). The author cannot find detailed photos to verify the presence of another “Flint-Face” logograph.

A protagonist of the passage is the **I[H]K’ “SQUARE-NOSED-BEASTIE”** God (showing a hand in its mouth, block p19) who may be related to the same god mentioned in deep time events at Palenque (Temple of the Inscriptions West Panel and Naranjo Altar 1); the event is said to happen (p20-p21) in the **6/8-mi-NAL** place (Schele and Grube 1990).

Passage IV (glyphs p23-p29) 13.0.0.0.0 [4 *Ajaw* 8 *Kumk’u*]

A second mention of the era day station is noted by the **TZUTZU-yi-ya 13 PIK** followed by a possible **ya-?-T1078/“FLINT-FACE”-la** verb. The god GI is present (p26) and the locale is the *jo’ nikte’ jena* (p28-p29).

Passage V (glyphs p26-p41) 9.13.10.0.0 7 *Ajaw* 3 *Kumk’u*

A Distance Number (p30-p33) of 12.12.0.0 is counted from [9.0.18.0.0] 1 *Ajaw* 3 *Mol* (p36-38) arriving at 9.13.10.0.0 7 *Ajaw* 3 *Kumk’u* the dedication date of the monument. A “scattering” is performed by most likely *Waxaklajun Ubah K’awiil* in the presence of various deities and lords?

Here are the dates in Chronological order:

13.0.0.0.0 4 *Ajaw* 8 *Kumk’u*

9.0.18.0.0 1 *Ajaw* 3 *Mol*

9.13.10.0.0 7 *Ajaw* 3 *Kumk’u*

Indirectly, linked to the last date, is the additional recording of the 10th *bak’tun* occurring on 10.0.0.0.0 7 *Ajaw* 18 *Sip* (Stela J, north side, block B1; Figure III.24) (also counted from 9.13.10.0.0. 7 *Ajaw* 3 *Kumk’u*). This collection of dates encompasses a vast count of days that is similar in temporal scope to other era day monuments from Piedras Negras and La Corona and “Tila” (see analysis of these monuments in this chapter)³³. At Piedras Negras the 9th, 13th and 10th *bak’tuns* are invoked (as they are on Stela J). This march of Period Endings runs through the millennia connecting the distant mythic past with the era date as well as current history and the future ending of the 10th *bak’tun*.

³³ La Corona Altar 4 as well connects its opening Long Count of 9.18.0.16.16 9 *Kib* 9 *Kej* to the era date 13.0.0.0.0 and then to the future 10.0.0.0.0 Period Ending (there are other Period Endings expressed but they are eroded away). Stela A from “Tila” directly connects an opening Long Count of 10.0.0.0.0 to the era date 13.0.0.0.0.

What is one to make of such vast leaps in time? I agree with Péter Bíró (p.c. 2008) and Stuart (2011:185) that a driving force to record era day passages is the celebration of the 13th *k'atun*. *K'inich Kan Balam II* of Palenque commemorates the 13th *k'atun* by erecting a triad of temples in anticipation of this Period Ending; *K'inich Yo'nal Ahk II* (Ruler 3) of Piedras Negras commemorated the occasion with the magnificent Altar 1. Unfortunately, *Waxaklajun Ubah K'awiil* of Copan took the throne about three and a half years after the end of the 13th *k'atun* so he missed officiating this very important celebration. Stela J was very likely his belated answer to the 13th *k'atun* Period Ending.

As mentioned, Morley (1920:150) thought that Stela J held an era date. No doubt what made him so adamant was the prominent **TZUTZ-yi-ya 13 PIK** for “finished 13 *bak'tun*” (located on Stela J to the viewer’s right at the far right corner of the second horizontal band, blocks p23-p24). But where is the expected Calendar Round 4 *Ajaw* 8 *Kumk'u*? Aside from the mention of a 1 *Ajaw* date in block p22, the era date Calendar Round seems deleted. The absence of the era date may be due to the scribe’s need to economize due to lack of available space. For instance, in three of the four dates shown (blocks p1, p3, p16, p22) the *haab* coefficient and month names are missing. Also the mention of the “finishing of 13 *pik*” is a phrase that is indicative of an era base date³⁴. In all other cases of the era date in this report, the phrase *tzutzuy 13 pik* always signifies the completion of the era on 4 *Ajaw* 8 *Kumk'u* and does not serve as a Distance Number³⁵.

If the era base is intended, then can the passage be linked to a known era day god, event or place name? As a matter of fact, there are such connections. The glyph block above the **13 PIK** (block p25) is **ya-u?- T1078/“Flint-Face”-la** (Figure III.26). This collocation may be similar to the or the “**Split-Earth”-laj** glyph we see in the inscriptions related to flowering jade trees mentioned on Palenque’s Temple of the Inscriptions mid Panel (Callaway 2006: 62-63). If the **T1078/“Flint-Face”** is a verb, the verbal suffixing here is not clear and needs further study. The next glyph in the sequence is the god GI who is a main protagonist on four era day monuments (“Yax Wayib” Mask, blocks A3-A4; Palenque Temple of the Cross, blocks C8-D8 and Vases K2796 and K7750— see Appendix III). The sacred locale where the event is said to take place is the **JO’ NIK-TE’**

³⁴ It is highly improbable that the statement **TZUTZUY 13 PIK** acts as a Distance Number between two of the dates. Rather when the scribe wishes to use **13 PIK** as a Distance Number, he will write the phrase “**13 PIK u-ti-ya**” as is done on Quirigua Zoomorph P (block E9).

³⁵ Note, in a contrary view, Grube and Schele (1990) reckoned that the **13 PIK** to acts as a Distance Number counting backward from the 9.0.18.0.0 1 *Ajaw* 3 *Mol* date. A subtraction or addition of **13 PIK** will arrive at another 1 *Ajaw* date.

je-na, a mythological place also tied to era day at Piedras Negras³⁶. So there is a Long Count expression for the finishing of the era, an unknown verb, and a god and a mythic locale relating to other era day expressions. Taking all these factors into consideration, there is good chance the passage may relate to era base. Yet despite Stela J's clear recording of a *tzutzuy 13 pik* statement, and the mention of GI and the sacred locale the *jo' nikte'*, there is not a preponderance of evidence to positively link the passage to era day activities. Additionally what is needed is a clear indication of a 4 *Ajaw 8 K'umk'u* Calendar Round or a parallel era day event. Until such a correspondence is found, Stela J cannot claim to hold an era day text.

III.11 Dos Pilas Panel 18 (A1-B6), Structure L5-49 — Figure III.28

Date of Composition: Late Classic.

Era Text: blocks A1-B6.

Location: Dos Pilas central summit structure, atop Structure L5-49.

Archive: Museo Nacional de Arqueología e Etnología de Guatemala?

Photographs: Unknown.

Drawings: Houston (1993:101, fig. 4-4); Freidel and Guenter (2006:72, fig. 10).

References: Houston and Stuart (1990); Palka (1990); Houston (1993:101); Freidel and Guenter (2006).

Associated Ruler: *Balaj Chan K'awiil*?

Associated Time Period: 9.13.5.0.0 1 *Ajaw 3 Pohp*.

Dos Pilas Panel 18, Structure L5-49 (A1-B6)

A1-4 AJAW	B1-8 KUMK'U
A2- TZUTZ-yi 13 PIK	B2-?
A3- K'AK'-?-EK'	B3-?
A4-?-CH'AM-ma	B4-?
A5-?	B5-?
A6-?	B6- YAX-“THREE STONE”-nal

³⁶ See Piedras Negras Altar 1 Fragment B, block P2.

Transliteration

4 AJAW 8 KUMK'U TZUTZ-yi 13 PIK . . . K'AK'-?-EK' . . . ?-CH'AM-ma . . .
YAX-“THREE STONE”-nal . . .

Transcription

4 ajaw 8 kumk'u tzutz[u]y oxlajun pik . . . k'a[h]k-?-ek' . . . ?-ch'am . . . yax-“three-
stone”-nal . . .

Translation

(on) four ajaw eight kumk'u it was finished thirteen piks . . . “firefly star (god)” . . . it is
the throwing? . . . new “three-stone” place . . .

Commentary

Panel 18 (Figure III.28) occupied a structure about four meters square in size. The building was part of three small masonry superstructures (all roughly identical and built along the same axis) located at the summit of Structure L5-49, the largest pyramid at Dos Pilas (Palka 1990:1). The inscriptions on the hieroglyphic stairway that stand at the base of the pyramid associate this building with the founding Dos Pilas Ruler, *Balaj Chan K'awiil* (Fahsen 2002). Joel Palka (1990) excavated the summit central building and discovered the carved rectangular tablet. Previously it was found that the flanking structures to the central temple held Panels 8 and 9, with Panel 8 from the west summit building and Panel 9 in the east summit building (Houston 1987:144 and 147). Panel 18 was located inside the rear of the central structure near the floor. It was shattered into several pieces and its surfaces were quite worn, with only the margins showing texts (Palka 1990). Houston and Stuart (1990) postulated that the surface damage could have been made in antiquity and that the panel once served as a small altar for burnt offerings as is suggested by the short passage at the end of the Panel 18 text (block G1) *u tah tun* for “his torch stone.” As to the historical personage mentioned in the text, Freidel and Guenter (2006) have recently proposed that Panel 18 Columns E and F describe in part the dedication of the three summit structures atop L5-49 and of the burial of the ruler *Balaj Chan K'awiil* (glyph D6-F1 refer to the burial of the king) in relation to the 9.13.5.0.0 *jo'tun* Period Ending (as indicated by reference at E6 expressing *u jo'tun*) which is very close to the probable death date of this king. The late Classic date is supported by the date of Late Classic ceramic shards found in the building that housed Panel 18 (Palka 1990).

The Panel 18 era day passage fills the initial two columns of text consisting of twelve glyph blocks, half of which are completely eroded and illegible. Enough of the

text survives to add an intriguing new deity to era day events. The passage opens with the Calendar Round 4 *Ajaw* 8 *Kumk'u* and is directly followed by the standard Long Count reference that “13 piks were finished.” The next legible glyph block is at A3, that contains a head with an infixed **AK'AB** logograph in the forehead, an abnormal skull shape, a disembodied eye attached to the front of the head and smoke issuing from the mouth (Houston 1993:101; Lopes 2006). A name carrying a “star sign” often qualifies the name as belonging to a celestial deity³⁷. About this deity, Luis Lopes (2006) building on observations made by Houston (1993:101) wrote:

The collocation is composed of a main sign which has the attributes of a firefly head, smoking a cigar, as may be observed by comparing it with the images above. Notice the **AK'AB** sign, the unusual shape of the skull, a small disembodied eye just above the ear and, most importantly, the smoke or flames issuing from the mouth. It is noteworthy that this logograph is distinct from the **AKAN** logograph, for the Maya god of wine and tobacco. The latter never occurs with a cigar or smoke coming out of its mouth. In addition, its skeletal form is clearly human-like, and therefore quite distinct from the unusual, prognathous form observed in these examples. The main sign is topped by a “Square Nosed Beast” and finally succeeded by an **EK'** (“star”). glyph. I suggest that the name may be transliterated as “Square Nosed Beast”- **KUHKAY-EK'** (Lopes 2006).

Lopes (2006) also offers convincing evidence that the main head sign represents the logograph for a firefly and that the name of the deity in question may have read something like “firefly star”³⁸. A firefly as a bearer of fire and light in primordial time is an intriguing thought. One can only speculate what pivotal role the insect might have played with in the primordial darkness prior to the first dawn of the new era. The insect’s direct association to fire is confirmed at the end of the Panel 18 text. The god appears again at glyph block H1 where he is directly linked to a fire ritual (E6-G1) involving a *u tah tun* or “his torch stone” (Houston 1993:101) for a *jo'tun* Period Ending celebration on the probable Long Count date 9.13.5.0.0 (Freidel and Guenter 2006:72).

³⁷ See era day gods on page 24 of the Dresden Codex who also employ the term **EK'** in their titles.

³⁸ Lopes’ description (2006:9-15) of the god is as follows: “As first outlined by Coe (1973: 99), the iconographic characteristics of the firefly are clear: a somewhat atypical skull (with an elongated 'beak'), an **AK'AB'** sign in the forehead, disembodied eyes attached to the skull, long wings with **AK'AB'** markings, a bulbous appendix in the firefly's abdomen, and a cigar held in the hand or in the mouth. This last feature clearly invokes the insect's ability to produce light.”

The insect can be seen smoking a fiery cigar and is mentioned in the *Popol Vuh* creation and strongly associated with the underworld scenes and gods depicted on Classic pottery K521, K1003, K1386, K1490, K 1815, K8007 and K8608 (Lopes 2006).

Returning to the era day text, the next visible glyph at A4 is possibly a relationship denoting “child of mother” (Houston 1993:101). If a parentage statement is intended, then it must relate to the deity at A3 or to a historical personage. A parentage statement to a god is atypical and to date, there are little to no texts describing the familial relationships between gods. Parentage statements of historical rulers do occur in conjunction with era day texts, but they are “normally” placed near end of a passage and after the mythic events are stated (see the “Yax Wayib” Mask inscription). On Panel 18 the mythic text seemingly runs from A1 to B6, starting with the era day at A1-B1 and ending with the mythic locale at B6 referring to the **YAX-“THREE-STONE”-NAL**. A likely alternative to a relationship reference at A4 is the verb *yal* that indicates that something is “thrown” (p.c. Jeff Buechler 2007). Gods throwing gods is a common stated action in mythic stories. For instance, the throwing of the “Baby Jaguar” into a mountain cave by the Death God occurs pictorially on several vases³⁹. Finally, the era day passage on Panel 18 ends with a description of where the era events took place at the **YAX-“THREE-STONE”-NAL**.

III.12 La Corona Altar 4 (Z3-A'1) — Figure III.29a

Date of Composition: Late Classic.

Era Text: Z3-A'1?

Location: *in situ* La Corona, *Grupo Principal*, north base of Structure 13Q-3 (Canuto et al. 2008:fig. 3 and 5).

Photographs: unpublished photos by Marcello Canuto and Joanne Baron.

Drawings: by David Stuart in Canuto et al. (2009:42, fig. 2.15).

References: Graham (1997); Canuto et al. (2008); Canuto et al. (2009:42).

Associated Ruler: Unknown.

Associated Time Periods: Opening Long Count 9.18.0.16.16 9 *Kib* 9 *Kej*; final Calendar Round (into the future) 10.0.0.0.0 7 *Ajaw* 18 *Sip*.

³⁹ see Kerr Vase K521 as well as a reference on Palenque's Temple of the inscriptions West Panel, to the God GI casting the heart of the Maize God into the ocean (Guenter 2007:51)

La Corona Altar 4 (Z3-A'1)

Z3-4 AJAW

Z4-8 KUMK'U

A'1- JEL-li? k'o-ba

Transliteration

. . . 4 AJAW 8 KUMK'U JEL-li? k'o-ba . . .

Transcription

. . . *kan ajaw waxak kumk'u jel k'o[jo]b* . . .

Translation

. . . (on) four ajaw eight kumk'u it is the changing (of the) altar/pedestal . . .

Commentary

In its entirety, the Altar 4 text contains a very lengthy 145 glyphic blocks. The inscription opens with a 9.18.0.16.16 9 *Kib* 9 *Kej* date and commemorates the “arrival” (C1-E6) of a woman to La Corona who is accompanied (H5-J1) by a *Sak Te' Ajaw* (p.c. David Stuart 2007). The arrival is then followed by an unknown event on 5 *Ok* 3 *Mol* with what might involve the raising up of a palanquin (p.c. Péter Bíró 2007; Canuto et al. 2009:42). Three or more Calendar Round dates and associated events follow (all unknown). Then at blocks Z3-Z4 the era date (Figure III.29) occurs followed by the standard *jel k'ojob* expression. Unfortunately, the succeeding glyphs are too weathered to read. The era passage may continue and include blocks B'1 through F'4 where at B'4 there is another possible reference to a palanquin event inflected with a /-ja/ suffix (p.c. Péter Bíró 2007; Canuto et al. 2009:42). Finally, the text closes with a Distance Number counting to the future Period Ending of the 10th *bak'tun* (G'1-H'3).

III.13 La Corona H.S. 3, Block I/Block A (C2-D3) — Figure III.29b

Date of Composition: Late Classic.

Era Text: none.

Location: Collection of Thomas Ford, Boston.

Photographs: unknown.

Drawings: Ian Graham; David Stuart in Canuto et al. (2009:37, fig. 2.9)

References: Canuto et al. (2009:36-37).

Associated Ruler: *K'inich ? Yook ?*

Associated Time Periods: most likely 9.12.8.13.0 4 *Ajaw* 8 *Kumk'u*.

Commentary

Block I from La Corona Hieroglyphic Stairway 3 records the obvious Calendar Round date 4 *Ajaw* 8 *Kumk'u* (C2-D2) followed by the action of a “second dancing” (**u-2-? AK'OT-TAJ-ja**); just sixteen days prior (D1) on a probable date of [9.12.8.12.4 1 *K'an*] 12 *K'ayab* (A1) there occurred the death of *Tok Chih* at the historical site of Wak'ab, indicating that both dates recorded on Block I fall within a probable historical time frame and are not mythical (Canuto et al. 2009:36-37). The inscription is included in this survey of era day passages since there is little doubt that the Maya would have recognized the mythical *gravitas* of the date 4 *Ajaw* 8 *Kumk'u* and associated it with the start of the era. This being the case, there is a likelihood that the action of dancing recorded on Block I may reflect a parallel primordial act that took place on era day. At present there is no era day text indicating dance, although there are numerous images of dancing gods within Maya iconography, especially the Maize God (see K633, K1271, K1837). The north face of Stela C displays the Te' God (an aspect of a primordial tree) in the state of dance (Looper 2003:166 after a p.c. Paul Johnson) and could be a reflection of a primordial act that featured dance.

III.14 Palenque Temple of the Cross, Main Panel (D3-D8) — Figure III.30-31

Date of Composition: Late Classic.

Era Text: Temple of the Cross Main Sanctuary Panel, blocks D3-D8.

Location: Museo Nacional de Antropología, Mexico City.

Photographs: Maudslay (1889–1902:Vol. IV, Plate 73-74).

Drawings: Maudslay (1889–1902:Vol IV, Plate75); Schele (2011a); Robertson (1991:fig. 9).

References: Lounsbury (1976); Schele et al. (1990:245-252); Stuart (2006a: 22); Stuart and Stuart (2008:195-198).

Associated Ruler: *K'inich Kan Balam II*.

Associated Time Periods: Opening Long Count 12.19.13.4.0 8 *Ajaw* 18 *Tzek*; the final Calendar Round 9.12.18.5.16 2 *Kib* 14 *Mol* (implied).

Palenque, Temple of the Cross, Main Panel (D3-D8)

D3-4 AJAW

C4-8 KUMK'U

D4- TZUTZ-yi

C5-13 PIK

D5-2-9 WINIK-ji-ya

C6-1 HAAB JEL-ji-ya

D6- k'o-ba TI'-CHAN-na

C7- YAX-“THREE STONE”-NAL D7- EHM-ta-CHAN-na

C8-1-?-NAL

D8- GI

Transliteration

. . . 4 AJAW 8 KUMK'U TZUTZ-yi 13 PIK 2-9 WINIK-ji-ya 1 HAAB JEL-ji-ya
k'o-ba TI'-CHAN-na YAX-“THREE STONE”-NAL EHM-ta-CHAN-na 1-?-NAL
GI . . .

Transcription

. . . *kan ajaw waxak kumk'u tutz[u]y oxlajun pik cha' bolon winik[i]jiy jun tun jel[i]jiy
k'o[jo]b ti' chan yax-“three-stone”-nal ehm ta chan jun [GI] . . .*

Translation

. . . (on) four ajaw eight kumk'u were finished (the) thirteen piks. Two and nine-score
days and one haab since (the start of the era), it is (the) altar/pedestal changing (at) the
edge of the sky (the) new “three-stone” place. It is (the) descent from the sky (of) GI . . .

Commentary

Scribes recorded the era day on the Tablet of the Cross and on the Tablet of the Sun. In each case, the passage is largely referential and serves as a “rhetorical anchor” (Stuart 2006a:102) to benchmark more important mythological and historical events that follow. Additionally, the Tablet of the Cross records the actions of the god GI (Stuart 2005b:164-166). Scribes noted the position of the day in the Long Count and followed it with a rather generic formula describing the “changing of the *k’ojob*” before moving on to more pertinent subjects. The day name, the era event and the cosmic locale mentioned are the minimal components that compose the era day expression.

Although the era day statement is short on the Tablet of the Cross, it does provide the essential components to record the era account (Figure III.30-31). The day is securely locked into the Long Count via Distance Numbers and the primary event and its sacred location are stated. Scribes wrote that the day 4 *Ajaw* 8 *Kumk’u* ends the 13th *pik* and use the verb *tzutzuy* to clarify it does indeed “finish” the Long Count and acts as the base date from which all events of the new era will be counted from.

The place where the era event takes place is at “the edge of the sky.” The word *ti’* is “edge” and also translates in Classic inscriptions as “mouth, opening, limit” (Boot 2009a). In Colonial Yucatec it can also mean “toward” such as *ti’ xaman* or “toward the north” (Barrera Vásquez 1980:798), and it can also imply movement like in the case *ti’ kab*, meaning “to descend”, as in toward the earth (Barrera Vásquez 1980:292). Whether *ti’* refers to a specific locale, general direction, or movement to a place, it is important to note that all these cases imply that the sky pre-exists and has specific referential boundaries⁴⁰. So, one can postulate that the sky was thought to already be in place on era day and new altar/pedestal was an established domain within the celestial sphere, a mythic locale that was well named in Late Classic Times as the new-“three-stone”-place⁴¹.

The “descent” of the god GI from the sky on era day is a fairly new revelation made by David Stuart (2005b:161-170). The action appears clearly on Palenque’s Temple of the Cross but was attributed to a different day by previous scholars. The mix-up

⁴⁰ Copan Stela 12 also mentions **ti’-CHAN** location in a context where Ruler 12 witnesses the “Three-Stone” Place at the “edge of the sky” on 9.11.0.0.0 (p.c. Michael Grofe 2012). Therefore the sky’s edge seems to indicate a place that is observable by humans with the naked eye.

⁴¹ Another bit of information that confirms the sky and its referential boundaries were in place (e.g. the cardinal zones) is the 819 Day calendar (Thompson 1971:212) of the Supplementary Series which according to calculations begins just three days prior to the era date on 13.19.19. 17.17 1 *Kaban* 5 *Kumk’u* (p.c. Peter Mathews 2011).

occurred since the passage in question is compressed into another text that relates to a future day **13 IK'** that occurs after the era base. Therefore, GI's descent was previously thought to take place on the latter **13 IK'** date (Freidel et al. 1993:69). The appearance of the god GI on era day corresponds to other manifestations of the god; namely, on the Early Classic "Yax Wayib" Mask where it is noted that he arrives at on era day and on Kerr Vases K2796 and K7750 where he is part of a group of gods who are "ordered" (Stuart 2005b:164-166). Stuart (2005b:167-170) convincingly argues that G1 is an aspect of the primordial dawning sun who wears on his head the "tripartite badge" (Robertson, M. 1974b); its central element (a bowl infixed with a sun sign) is the sign for east. GI is said to "descend from the sky." Perhaps in this case, the descent describes the god descending to earth after reaching the noon zenith (Stuart 2011a:226).

11.15 Palenque, Temple of the Sun, Main Panel (D16-E3) — Figure III.32-34

Date of Composition: Late Classic.

Era Text: Temple of Sun, Main Panel, blocks (D16-E3).

Location: *in situ* Group of the Cross, Palenque.

Photographs: Maudslay (1889–1902: Vol. IV, Plate 87).

Drawings: Maudslay (1889–1902: Vol. IV, Plate 88-89); Schele (2011a); Robertson, M. (1991:fig. 95);

References: Schele et al. 1990: 245-252); Stuart (2005a:166); Stuart et al. (2008:185-216).

Associated Ruler: *K'inich Kan Balam II*.

Associated Time Periods: Opening Long Count 1.18.5.3.6 13 *Kimi* 19 *Kej*; and 9.12.18.5.16 2 *Kib* 14 *Mol*; final Calendar Round 9.12.11.12.10 8 *Ok* 3 *K'ayab*.

Palenque, Temple of the Sun, Main Panel (D16-E3)

D16- **JEL-ji-ya**

E1- **k'o-ba**

F1-**TI'-CHAN-na**

E2- **YAX-"THREE-STONES"-NAL**

F2-**4 AJAW**

E3-**8 KUMK'U**

Transliteration

. . . JEL-ji-ya k'o-ba TI'-CHAN-na YAX-"THREE-STONES"-NAL 4 AJAW 8 KUMK'U . . .

Transcription

. . . *jel[i]jiy k'o[jo]b (u) ti' chan yax-"three-stone"-nal chan ajaw waxak kumk'u . . .*

Translation

. . . (since) the altar/pedestal changing back then (at) the edge of the sky, new "three-stone" place (on) four *ajaw* eight *kumk'u*. . .

Commentary

As mentioned, the era date passage is largely referential on the Tablet of the Sun (Figure III.32-34). It serves as a "rhetorical anchor" (Stuart 2006a:102) to benchmark more important mythological and historical events that follow. Minimally, it outlines the basic components of a central event—the changing of the *k'ojob* and its locale at "the edge of the sky new 'three-stone' place."

III.16 Piedras Negras Altar 1 (K1-P2) — Figure III.35-41

Date of Composition: Late Classic.

Era Text: Fragment B, right half, blocks K1-P2.

Location: *in situ* Piedras Negras (now in five fragments labeled A-D), West Group, main plaza.

Photographs: Maler (1901: Plate VIII); Satterthwaite (1931-32; photo numbers 14, 15, 118; 1932:179); Mason (1934b:9; 1935a:545); Morley (1937-1938: plate 138f, plate 143a-d, 144a-d).

Drawings: Maler (1901:45, fig. 19); Morley (1937-1938:39g-h), Montgomery. (1994:46f), Stuart (in Stuart and Houston 1994:34, fig. 36a-b and 71, fig. 83), Schele (in Taube 1998:443, fig 7a); Montgomery (1994:48); Teufel (2004:535-536); John Montgomery (2011).

References: Thompson (1944b); Morley (1937-38:vol. 3, 285-294); Mathews (1993:87); Schele (1991b:121); Teufel (2004:529-536).

Associated Ruler: *K'inich Yo'nal Ahk II* (Ruler 3).

Associated Time Periods: 9.0.0.0.0 [8 *Ajaw* 18 *Pax*] (previous era); 8.13.0.0.0

9 *Ajaw* 3 *Sak* ; 9.0.0.0.0 8 *Ajaw* 13 *Keh*; 9.4.0.0.0 13 *Ajaw* 18 *Yax*; 9.10.0.0.0 1 *Ajaw* 8 *K'ayab*; 9.12.19.13.4 3 *K'an* 7 *Muan*; [9.13.0.0.0 8 *Ajaw* 8 *Woh*]; 10.0.0.0.0 7 *Ajaw* 18 *Sip*.

Piedras Negras Altar 1, Fragment B, Right Half (K1-P2)

K1-4 AJAW L1-8 KUMK'U

K2- TZUTZ-yi 13 PIK L2- u-JEL k'o-ba?

M1-“Paddler Gods” N1- na?- ?

M2- u-ti-ya ti'-CHAN-ni N2- YAX-“THREE STONE”-NAL

O1- yi?-IL-ji?-ya? P1- AHK?-K'UH

O2- yo-KIB AJAW P2- u-ti-ya 5-“FLOWER”-NAL

Transliteration

**. . . 4 AJAW 8 KUMK'U TZUTZ-yi 13 PIK u-JEL k'o-ba? “Paddler Gods” na?- ?
u-ti-ya ti'-CHAN-ni YAX-“THREE STONE”-NAL yi?-IL-ji?-ya? ?-AHK?-K'UH
yo-KIB AJAW u-ti-ya 5-“FLOWER”-NAL . . .**

Transcription

*. . . kan ajaw waxak kumk'u tutzuy uxlajun pik ujel k'o[jo]b “paddler gods” na?-?
u[h]ti[ji]y ti' chan yax-?-nal yil[a]jiy k'inich yo'nal ahk II k'uh yokib ajaw u[h]tiy jo'-
“flower”-nal . . .*

Translation

*. . . (on) four ajaw eight kumk'u it was finished (the) thirteen pik, it is the altar/pedestal
changing of (the) “paddler gods” ? it happened back then (at) the edge of the sky, the new
“three-stone” place (and) was witnessed by k'inich yo'nal ahk II, holy lord of yokib, it
happened at the five “flower” place . . .*

Commentary

K'inich Yo'nal Ahk II (Ruler 3) of Piedras Negras presumably commissioned Altar 1 (Figure III.35-37) during his reign, a span lasting from 9.12.14.13.1 7 *Imix* 19 *Pax* (687 AD) to before the accession of Ruler 4 on 9.14.18.3.13 7 *Ben* 16 *K'ank'in* in 729 AD (Martin and Grube 2000:145). This is confirmed by the fact that Ruler 3 is said to have witnessed the commemoration of era event at Piedras Negras (blocks O1-O2). Altar 1 was most likely carved for the dedication of the 9.13.0.0.0 8 *Ajaw* 8 *Woh* Period Ending celebration (this day is recorded on Support 2 and is now weathered away but indicated

by a Distance Number of seven *k'atuns* subtracted from the 10th *bak'tun* Period Ending recorded on Support 3), a date that falls well into Ruler 3's reign. The 13th *k'atun* Period Ending was commemorated elsewhere in the Late Classic like within the Palenque's Triad Group. The 9.13.0.0.0 anniversary was most likely thought as "numerological reflection" (Stuart 2011a:185) of the era base date and so served to motivate kings to commemorate the 13th *k'atun* by way of buildings and altars that evoked an era day program.

The circular altar is carved with text on the top surface and along its sides and once rested on three rectangular stone pillars (Figure III.35) which are also carved with glyphs on their outer faces (Figure III.37a-e). Regrettably, when the altar was moved by excavators (Figure III.36) the circular stone shattered into five parts, now labeled A through D. Most likely there was a fourth support now lost (as inferred by the text on Support 3 that breaks off in mid-passage). The altar top is almost completely eroded with only faint traces of glyphic blocks surviving along its top perimeter (Figure III.39a-b). However sufficient outlines exist to see two seated figures in the center of the circular frame facing one another. A drawing made by Maler (1901:45, fig. 19) confirms that the top of Altar 1 was indeed once carved with a lengthy inscription (Figure III.39a).

The text begins at block D2, the left half of Fragment B and follows through to Fragments C, D, A circling back to the left half of Fragment B (Figure III.40a-d). The text then continues down the throne legs with Support 1, 2, 3 read in sequence (Figure III.41a-c)⁴². As a whole, the inscription records an impressive list of dates and period endings that follow one another sequentially⁴³:

9.0.0.0.0	[8 <i>Ajaw</i> 18 <i>Pax</i>]	(previous era) Frag. B (E1-E2)
13.0.0.0.0	4 <i>Ajaw</i> 8 <i>Kumk'u</i>	Frag. B (K1-K2)
8.13.0.0.0	9 <i>Ajaw</i> 3 <i>Sak</i>	Frag. B (S1-S2)
9.0.0.0.0	8 <i>Ajaw</i> 13 <i>Keh</i>	Frag. C (B'1-B'2)
9.4.0.0.0	13 <i>Ajaw</i> 18 <i>Yax</i>	Frag. C & frag. C (C'2)

⁴² My final reading order of the text and associated dates is based on calculations offered by Michael Grofe (p.c. 2012) who explained that it was a common mistake to calculate the Distance Number at block A2 of 19.13.4, and subtracting this number from a Long Count of 9.0.0.0.0. to reach the pre-era Long Count of *8.19.0.4.16 (Teufel 2004:529-536). But the Distance Number at A2 is actually continued in block B1 as [2].19.13.4, and it very nicely corresponds with the resulting date of 3 *K'an* 7 *Muan* at J'1-K'1. Furthermore, from field photos taken of Altar 1 while it sat intact, it is evident that Support 1 sits directly under blocks A-C, thus connecting two sets of texts physically and that follow each other sequentially.

⁴³ Morley's (1937-1938) sequence of dates differs from the current reading order. I read the dates sequentially as they are written by the scribe while Morley is akin to place dates from the three supports as occurring before the era base date. For a full discussion of the complexities see Teufel (2004:529-536).

9.10.0.0.0	1 <i>Ajaw</i> 8 <i>Kayab</i>	Frag. A (H'1-G'2)
9.12.19.13.4	3 <i>K'an</i> 7 <i>Muan</i>	Support 1 (J'1-K'1)
[9.13.0.0.0	8 <i>Ajaw</i> 8 <i>Woh</i>]	Support 2 (implied by DN at N'5)
10.0.0.0.0	7 <i>Ajaw</i> 18 <i>Sip</i>	Support 3 (O'5-N'6)

This count of Period Endings runs through the millennia connecting the distant mythic past with current history as well as the future ending of the 10th *bak'tun*. For the era day event, the scribe noted the position of the day in the Long Count 4 *Ajaw* 8 *Kumk'u* and connected the day firmly with the “finishing” of the 13th *bak'tun* (Figure III.38a-b). The day is followed by the rather generic formula describing the changing of the altar/pedestal at the edge of the sky at the new “three-stone” place. The agents of the changing are the “Paddler Gods” who are known from Quirigua Stela C and are responsible for erecting the first of the three stones on era day. Here, it is strongly inferred by transitive verb (**u-JEL k'o-ba**) and the basic syntax of the passage (verb-object-subject) that the “Paddler Gods” are the sole agents of the altar/pedestal changing event. Perhaps these gods were thought to play a more pivotal role than what is indicated at Quirigua. The passage ends with the statement that Ruler 3 witnesses the era event at a sacred locale named five “flower” place; a locale that is identified as a place where scribes originate on Kerr vase K6020 (Boot 2008b:15) ⁴⁴. The flowery place could also be referring a floral paradise linked to the adobe of the gods and realm of the sun (Taube 2004:69) that is like-in-kind to the Aztec sacred place in which all myth originates known as *Tamoanchan* and called “Where-the-Flowers-Grow” (López Austin 1993:54). By witnessing the era event the ruler is emphatically saying that he is attesting to those primordial events at the start of the era from the standpoint of a paradisaical realm. As discussed in Chapter II, section II.5 of this dissertation, the witnessing of a primordial act may be an indication of a myth as a device of activation and transport that aggregates the past and present into a single moment within the rhythms of the calendar.

III.17 Quirigua Stela C, East Side (A1-B15) — Figure III.42-46

Date of Composition: Late Classic.

Era Text: east side, blocks A1-B15.

Location: *in situ* at Quirigua, Guatemala the Great Plaza (North).

⁴⁴ This sacred locale is also on Kerr vases K0717, K7447 and K8457; for a more indepth discussion see Boot (2008b:15).

Archive: Cast of Stela C texts in the British Museum, London as well as in the Museum of Man San Diego (Stone 1983:281).

Photographs: Maudslay (1889–1902:Vol. II, Plate 17);Looper (2003:185).

Drawings: Maudslay (1889–1902:Vol. II, Plate 19); Schele andLooper (1996:92);Looper (2003:159); Stuart (2011a:218).

References: Maudslay (1889–1902:Vol. II); Morley (1937-1938:24-26); MacLeod (1991); Schele (1992:122,124-125); Freidel et al. (1993:64-68);Looper (1995a:24-30); Schele andLooper (1996:92); Martin and Grube (2000:221);Looper (2003:158-172); Carrasco (2005:455);Pharo (2006:35 and 421); Aveni (2009:49); Stuart (2011a:216-222).

Associated Ruler: *K'ak' Tiliw* (Martin and Grube 2000:221);Looper (2003:158-172).

Associated Time Periods: Opening Long Count and monument dedication 13.0.0.0.0 4 *Ajaw* 8 *Kumk'u*; connecting Long Count (west side of Stela C) 9.1.0.0.0 6 *Ajaw* 13 *Yaxk'in* and the intermediate date 9.17.5.0.0 6 *Ajaw* 13 *K'ayab*.

Quirigua Stela C East Side (A1-B15)

A1-ISIG	B1-ISIG
A2-ISIG	B2-ISIG
A3-13 PIK	B3-mi-li WINIKHAAB
A4-mi-li HAAB	B4-mi-WINIK
A5-mi-li K'IN	B5-4 AJAW
A6-8 KUMK'U	B6-JEL-la-ja k'o-ba
A7-3 K'AL-ja TUN	B7-u-TZ'AP-wa
A8-TUN-ni "JAGUAR PADDLER GOD"	B8-"STINGRAY PADDLER"
A9-u-ti-ya NAH-JO'-CHAN	B9-HIX "THRONE" TUN-aj
A10-u-TZ'AP-wa TUN-ni	B10- IK'-NAH-YAX- ?
A11-u-ti-ya KAB "EAR SPOOL?"-ma?	B11-"REPTILE? THRONE"
	TUN-ni
A12- i-u-ti-ya K'AL TUN-ni	B12-ITZAMNAJ
A13- HA' "THRONE" TUN-ni	B13- u-ti-ya TI' CHAN-na
A14-YAX-"THREE-STONE"-NAL	A14- TZUTZ-ya 13 PIK
A15- u-KAB-ya	A15-6 CHAN AJAW-wa

Transliteration

“ISIG Patron of the Month Kumk’u” 13 PIK mi-li WINIKHAAB mi-li HAAB mi-WINIK mi-li K’IN 4 AJAW 8 KUMK’U JEL-la-ja k’o-ba 3-TUN-K’AL-ja u-TZ’AP-wa TUN-ni “JAGUAR PADDLER GOD” “STINGRAY PADDLER” u-ti-ya NAH-JO’-CHAN HIX “ALTAR/THRONE” TUN-aj u-TZ’AP-wa TUN-ni IK’-NAH-YAX- ? u-ti-ya KAB “EAR SPOOL?”-ma? “REPTILE? ALTAR/THRONE” TUN-ni i-u-ti-ya K’AL TUN-ni ITZAMNAJ HA’ “ALTAR/THRONE” TUN-ni u-ti-ya TI’ CHAN-na YAX-“THREE-STONE”-NAL TZUTZ-ya 13 PIK u-KAB-ya 6 CHAN AJAW-wa

Transcription

ISIG, oxlajun pik, mi[hi]l winikhaab, mi[hi]l haab, mi[hi]l winik, mi[hi]l k’in, kan ajaw waxak kumk’u, je[h]l[a]j k’o[jo]b k’a[h]l[a]j ox tun, utz’ap[a]w tun “jagua r paddler god” “stingray paddler god” u[h]ti[ji]y nah jo’ chan “jaguar altar/throne” tunaj, utz’apaw tun i[h]k’ nah -yax-? u[h]ti[ji]y kab “earflare”-ma “reptile?altar/throne” tun, iu[h]ti[ji]y k’al tun itzamnaj ha’ “altar/throne” tun u[h]ti[ji]y ti’ chan yax “three stone” nal, tzutz[u]y oxlajun pik ukab[aj]iy wak chan ajaw

Translation

ISIG, thirteen pik, zero winkhaab, zero haab, zero winik, zero k’in, four ajaw eight kumk’u, (it) was changed (the) altar/pedestal, thrice was bound the stone, (the) “jaguar paddler god” (and) “stingray paddler god” planted (the first) stone, it happened back then (at the) nah jo’ chan jaguar “altar/throne” stone, (the) black house great-?-“god” planted (the second) stone, it happened back then (at the) earth “ear-flare reptile? altar/throne” stone, then it happened back then (that) itzamnaj’s binding (of the third) stone (at the) water “altar/throne” stone, it happened back then (at the) sky edge new “three stone” place, (then) were finished thirteen piks, it was tended back then (by the) wak chan lord(s).

Commentary

Of all the era day passages from the Classic Period, Stela C holds by far the longest and most legible account of era day activities (Figure III.42-46). The passage opens with a full Long Count and Calendar Round Date (Figure III.44) of 13.0.0.0.0 4 Ajaw 8 Kumk’u (A1-A6). The text offers no further calendar information (in the form of a Long Count Supplementary Series) but instead launches straight into era day specifics. The day name is followed by the popular *jehlaj k’ojob* statement (B6), indicating that a change of *k’ojob* has occurred (Figure III.45). As discussed in Appendix V of this

dissertation, the term *k'ojob* seems to denote an altar or pedestal on which a god effigy or an *incensario* may stand. The *k'ojob* could be related to the three altar/throne stones that are subsequently erected by the gods.

At block A7 scribes note that “thrice is bound the stone” thereby anticipating the two “stone plantings” and one “stone binding” of the three altar/thrones that immediately follow (Looper 1995a:24). Alternatively, the second stated event *k'al* also means “to close” (Barrera Vásquez 1980:367). **K'ALAK K'IN** or “closing of days” is defined in the *Cordemex* (Barrera Vásquez 1980:369) as *creación del mundo*; here, the closing of the days corresponds to the creation of the world when there occurred the “conclusion of the establishment of one or all of the time cycles” (López Austin 1993:47). The conclusion of the cycles of the Long Count at the renewal of the era certainly fits with this idea of closure.

Via the placement of the three stones at three distinct sacred locales, the gods are marking what appears to be a three-fold division of space that is like-in-kind to the three-tired division of the cosmos that is so basic to Mesoamerican worldview (Stuart 2011a:221-222). The first two events stated are “stone plantings” (B7-A8 and A10) or monument raisings (similar to when a stela is erected in place) while the third is another “stone binding” affair (A12). The actions of *k'al tun* “stone binding” and *tz'ap tun* “stone plantings” are similar to stone dedications related to *k'atun* period endings when twenty stones (*tuns*) are ritually “bound” together (Stuart 2011a:219). The first “stone planting” is done by the “Paddler Gods” (A8-B8) and it is said to happen in a locale named *nah jo'chan* (A9)⁴⁵. The second stone planting was accomplished by an obscure god named *Ihk' Nah Yax-?* and it takes place at “earth-‘earflare’” place (A11). The third and final stone is dedicated or “bound” by the god *Itzamnaj* (B12). Scribes designate this third stone as the “water-altar/throne-stone” (A13) and record that its dedication happens at the “sky edge new ‘three-stone’ place.” Alternatively, the “sky edge new ‘three-stone’ place” may be indicative of the general locale where all three events and stones are set, since other era day texts like those at Palenque and Piedras Negras state that the *jehlaj k'ojob* event does indeed happen at the same location. Finally, the Stela C passage terminates with the mention that the 13th *bak'tun* (B14) came to a close under the supervision of the “Six Sky Lord/s” (B15).

⁴⁵ Incidentally, the *nah jo'chan* place has a strong association with the North (*xaman*) as is indicated on Kerr vessel K688 where it is the dark locale where the “Baby Jaguar” sits on a zoomorphic stone-serpent-throne (Stuart et al. 1994:71).

III.18 Quirigua Altar P' (L2-N2) and (Q1-Q2) — Figure III.47-54

Date of Composition: Late Classic.

Era Text: (L2-N2) and (Q1-Q2).

Location: *in situ* Quirigua, South-West corner of the ball court plaza.

Photographs: Morley (1937-1938: frontispiece to Vol. IV); Photos by Giles Healey (2010) in University of Pennsylvania Museum Archaeology and Anthropology Archives; On-line Harvard VIA (2011).

Drawings: Jones (1983); Schele and Looper (1996); Looper (2007:154-155).

References: Morley (1937-1938, II:206-214); Jones (1983:139); Stone (1983:139); Schele and Looper (1996:197-200); Schele and Looper (1996:197-200); Looper (2003).

Associated Ruler: "Sky Xul."

Associated Time Periods: Opening Long Count 9.18.5.0.0 4 *Ajaw* 13 *Kej*.

Quirigua Altar P' (K1-N4 and Q1-R2)

K1-i-u-ti 4 AJAW U-TZ'AK-aj MIH?-[K'IN] MIH-WINIK-ya

L2-5 HAAB 18 WINIKHAAB 9 PIK-ji 4 AJAW

K2-8 KUMK'U TZUTZ-ya? 13 PIK 13?/?-HAAB?

L2-ju-?-K'AK' MIH?-IK'-NAL? ? che-?-wa

M1-?- ni?-wa?-TE'-?

N1-u-ju-bu-li "SQUARE-NOSED-BEASTIE"-SAK? YAX CHAN

M2-u-ju-bu-li "SQUARE-NOSED-BEASTIE" SAK? YAX CHAN?/IK'?

N2-u-KAB-ji "PADDLER GODS"/CHAN-ti

Q1-ha-?-ni? U KAB-?

R1-"SKY XUL"

Q2-"SQUARE-NOSED-BEASTIE?" K'UH "Quirigua EG"-AJAW-wa ba-ka-ba

R2-ti-4 AJAW 13 KEJ NAH-JO'-TUN?-ni?

Transliteration⁴⁶

Blocks K1-L4

i-u-ti 4 AJAW U-TZ'AK-aj MIH?-[K'IN] MIH-WINIK-ya 5 HAAB 18

**WINIKHAAB 9 PIK-ji 4 AJAW 8 KUMK'U TZUTZ-ya? 13 PIK 13?/?-HAAB? ju-
?-K'AK' MIH?-IK'-NAL? ? che-?-wa**

⁴⁶ Due to the lengthy nature of the text, the Altar P' translation will be divided into three sections: blocks K1-L4, blocks M1-N4 and blocks Q1-R12.

Blocks M1-N4

?- ni?-wa?-TE’-? u-ju-bu-li “SQUARE-NOSED-BEASTIE”-SAK? YAX CHAN u-ju-bu-li “SQUARE-NOSED-BEASTIE” SAK? YAX CHAN?/IK’? u-KAB-ji “PADDLER GODS”/CHAN-ti

Blocks Q1-R12

ha-?-ni? U KAB-? “SKY XUL” “SQUARE-NOSED-BEASTIE?” K’UH “Quirigua Emblem Glyph”-AJAW-wa ba-ka-ba ti-4 AJAW 13 KEJ NAH-JO’-TUN?-ni?

Transcription

Blocks K1-L4

. . . iu[h]t kan ajaw utz’akaj mih [k’in] mih winik[iji]y jo’ haab waxaklajun winikhaab bolon pik[i]ji[y] kan ajaw waxak kumk’u tzutz[uy] oxlajun pik oxlajun/wuk? haab? ju-?-k’ak’ mih-ik’?-nal ?-che-?-w

Blocks M1-N4

? niwate-? ujubul “square-nosed-beastie” sak yax chan ujubul “square-nosed-beastie” sak yax chan ukab[i]jiy “paddler gods”

Blocks Q1-R12

ha-[in] ukab [iji]y “sky xul” “square-nosed-beastie-?” k’uh “Quirigua emblem glyph” - ajaw bakab ti kan ajaw oxlajun kej nah jo’ tun . . .

Translation

Blocks K1-L4

. . . it happens four ajaw, “its count is” zero k’in, zero winik, five haab, eighteen winikhaab (and) nine pik back then (on) four ajaw 8 kumk’u, are finished 13 piks ? ? spears? fire (at) mih ik’ nal ?

Blocks M1-N4

?- it is the downing of (the) “square-nosed-beastie” sak yax chan, it is the downing of (the) “square-nosed-beastie” sak yax chan, it was tended (by the) “paddler gods”

Blocks Q1-R12

It is he, it is tended by “sky xul” “square-nosed-beastie-?” holy quirigua lord bakab, on four ajaw thirteen kej (the) nah jo’ tun (period ending) . . .

Commentary

Altar P’ (Figure III.47) is the companion altar to the throne Zoomorph P (Figure III.64). The two monuments invoke a similar earth related iconography; Altar P’ displays a masked, anthropomorphic figure leaping out of, or falling into, a giant chasm in the earth that is supported on the back of a giant bird while Zoomorph P displays a bicephalic

creature whose back supports a giant mountain *witz* mask. Out of one end emerges a seated human figure from a gaping maw while the opposite end displays a giant mask of the Principal Bird Deity (Stone 1983).

Altar P' and Zoomorph P also are related in time in that they both record the same initial Long Count date of 9.18.5.0.0 4 *Ajaw* 13 *Kej* (Morley 1935:113) and most likely were dedicated in tandem on the same day. Altar P' is one of the few monuments that evoke the era event in conjunction with a *jo'tun* ending rather than a *k'atun* ending. A full array of modern *in situ* and archival photos and drawings of the Altar P' era day text are provided in Figure III.48 through Figure III.54. A historical dedication event is recorded on Altar P' at block I1, and is noted by the phrase **?-ko-wa ch'a-? ?-K'AK'-?** with the first part most likely referring to the standard **CHOK-wa ch'a-ji** phrase for the scattering of incense. The second part of this phrase mentions **K'AK'** or fire (Figure III.53). The reference to fire is important since it will be mentioned again in relation to an era day event recorded at (L2) as **ju-lu?-? K'AK'** at a possible locale written as **MI-IK'?-NAL**.

After the scattering event by Sky Xul, there is a Distance Number (I2) of 10.1.1 counting backward to his accession (J2) ten years earlier on [9.17.14.16.18] 9 *Etz'nab* 1 *K'ank'in*. After the accession passage the text takes a giant leap back into primordial time to era day from the 9.18.5.0.0 4 *Ajaw* 13 *Kej* opening date, a Distance Number of the same amount of days 9.18.5.0.0 is counted backward in time thereby arriving at the era date 4 *Ajaw* 8 *Kumk'u* (K1-L1). The standard phrase “was finished 13 *pik*” immediately follows (K2). One expects a verb to follow next but instead there is a possible *haab* sign prefixed by a possible number 13/7?; taken together the two might read 13/7-*haab*? This collocation may be another cycle or is expressing some sort of temporal reference to time and the structure of the Long Count, or perhaps is similar in nature to *ti' haab* expressions found elsewhere in the script denoting that the “edge of the *haab*” is reached (the start of the month)⁴⁷. Next at block L2 there is expressed **ju-lu?-K'AK' mi-?-NAL**. The **/ju-/** prefix may indicate the term *jul* or “spear”⁴⁸; If so, then a possible reading for this part of the passage is “spear fire (at) *mih-ik'?-nal*.” The **K'AK'** logograph with its fire scrolls is more definitive. The introduction of a ritual relating to fire at the start of the era is an intriguing thought, and may refer to the new dawn or a new fire ceremony. The mention of fire could also be connected to the fire rituals found so

⁴⁷ See Ek' Balam, Structure 1 Capstone 14 glyph block A3 for *ti' haab* expressions.

⁴⁸ Note: Schele andLooper (1996:3) translated this glyphic block as possibly standing for *huli* for “arrived”, this is not a possibility for it is now understood that the verb *hul* is spelled with a soft /h/ and not the hard velar /j/.

prevalent in the context of Maya Initial Series (Grube 2000). In the case of Altar P' it is clear that scribes are paralleling two fire events, one historical and one mythical with the former located at block I2 during the historical *jo'tun* scattering ritual by Sky Xul.

The next readable text occurs at N1-M2 with a very clear couplet: **u-ju-bu-li “SQUARE-NOSED-BEASTIE” SAK? YAX CHAN, u-ju-bu-li “SQUARE-NOSED-BEASTIE” SAK YAX CHAN?/IK’**. Based on reading *jubul* as related to a “twisted cord” and “square-nosed-beastie” as representing a white flower, Schele and Looper (1996:93; Looper 2003:170, 177) translated the passage as: “the twisted cord of the white flower first sky, the twisted cord of the white flower first sky.” Their translation was built partly on Yucatec dictionary glosses for *hubnal* as “string or cord”, and partly on an iconographic argument relating twisted cords to white flowers in the form of a “Square-Nosed-Beastie” as portrayed in Maya art. I suggest that an alternative translation of the word *jubul* and its conceptual link to the war verb *jubuy* and to the context of casting down of one’s foe following a conquest. In a war context, the passage *ujubul* “square-nosed-beastie” *sak yax chan* translates as “it is the downing of the white ‘square-nosed-beastie’ new sky” and relates to the name a conquered foe rather than a twisted cord. Interestingly, the same **SAK “SQUARE-NOSED-BEASTIE” CHAN** is mentioned (Figure III.70a-c) as part of the king’s title on Zoomorph P (circular cartouche # 11)⁴⁹. Obviously, the king incorporates the theonym of the “square-nosed beastie” into his own title as part of a name incorporation; perhaps in this case, the name of a vanquished god.

Next, it is mentioned (N2) that the era event is presided over by the “Paddler Gods” (Schele and Looper 1996:93). After the “Paddler Gods”, the text breaks and starts again at columns Q and R and then is followed by columns O and P. There are good rhetorical reasons to suggest that this reading order is correct; at blocks Q1-Q2, the text emphasizes that it is “Sky Xul holy lord of Quirigua, *Bakab*” who in this scenario presides over the era day event and the actions of the gods. The era event followed by the mention of the officiate is similar to what is found in other era day passages like on Piedras Negras Altar 1, the “Yax Wayib” Mask and “Tila” Stela A; in all three of these latter cases the historical rulers emphasize that they are the primary witness to era day activities. In the case of Altar P’, Columns Q-R state emphatically (using the T145 sign to spell *ha’i* for “that one”) that it is Sky Xul the Quirigua *Bakab* who oversees 4 *Ajaw* era day celebration in conjunction with the 4 *Ajaw* 13 *Kej jo’tun* Period Ending (R2).

⁴⁹ A conflated version of the title may also occur in Sky Xul’s title at Alt. P’ at block Q2.

III.19 Quirigua Zoomorph G, East Side (Q5-T2) — Figure III.55-60

Date of Composition: Late Classic.

Era Text: Q5-T2?

Location: *in situ* Quirigua, The Great Plaza (North).

Archive: Cast of texts in the British Museum, London (Stone 1983:281).

Photographs: Maudslay (1889–1902:Vol II, Plate 41 and plate 43c); Nusbaum (2010:photos 60854 and 132924).

Drawings: Maudslay (1889–1902:Vol II, Plate 44);Looper (1991b:7, fig. 2; 2001:7).

References: Maudslay (1889–1902:Vol II); Morley (1935 and 1937-1938:169-176); Stone (1983); Schele andLooper (1996); Martin and Grube (2000: 222);Looper (2003:186-188).

Associated Ruler: Zoomorph G was created by the ruler “Sky Xul” as a memorial to his predecessor *K’ak’ Tiliw* (Stone 1983:96-97 (Martin and Grube 2000:222;Looper 2003:186-188).

Associated Time Periods: Opening Long Count and mon. dedication 9.17.15.0.0 5 *Ajaw* 3 *Muan*; burial Date of *K’ak’ Tiliw*, 9.17.14.13.12 8 *Eb* 15 *Yax* (day preceding the second solar zenith of the year (Looper 2003:186).

Quirigua Zoomorph G, East Side (Q5-T5)

Q5- u?-ti-ya 4 AJAW R5-8 KUMK’U TZUTZ?-ya

Q6-13? PIK u?-ti-ya R6-?-CHAN HA’?-AT-wa

S1- CHAN?-na CHEN?-na T1-?-ya-ji ?-?

S2-“Paddler Gods?” T2-?

S3-? T3-?

S4-? T4-?

S5-18 u-ba T5- K’AWIIL xu-pi AJAW

Transliteration

. . . u?-ti-ya 4 AJAW 8 KUMK’U TZUTZ?-ya 13? PIK u?-ti-ya ?-CHAN HA’?-AT-wa CHAN?-na CHEN?-na ?-ya-ji ?-? “Paddler Gods?” . . . u-BAH 18 u-ba K’AWIIL xu-pi AJAW . . .

Transcription

. . . u[h]ti[ji]y kan ajaw waxak kumk'u tzutzuy oxlajun pik u[h]ti[ji]y ?-chan ha'? ?-at-wa chan chen ?-ya "paddler gods?" . . . u bah waxaklajun u bah k'awiil "copan" ajaw . . .

Translation

. . . it happened back then (on) four ajaw eight kumk'u it was finished thirteen piks, it happened back then (at) ?-four/serpent/sky water? bathed?/partenored with? (at) sky-cave ? "paddler gods?" . . . it is the image of waxaklajun u bah k'awiil copan lord . . .

Commentary

Zoomorph G (Figure III.55a) rests on three large stone slabs and depicts a crouching "waterlily" jaguar complete with a dotted pelt and a set of huge claws; out of its gaping mouth and rear emerge two anthropomorphic figures donning skeletal headdresses (Morley 1935:99; Stone 1983;Looper 2003:187). The head and back of the creature is oriented along a north-south axis and the carved text appears along its lower and mid east-west sides. The era date passage is arranged in a large square of glyphic blocks (consisting of four columns and six rows) that sits along the right mid section and between the flexed leg and arm of the creature. Figure III.56 through Figure III.60 provide photos and drawings of the era day text.

The entire inscription on Zoomorph G breaks down into four basic episodes: 1) monument dedication, 2) era day passage, 3) death and burial of the king, 4) a remembrance of historical exploits of the king and mention of his future facilitation of the 10th *bak'tun*.

Episode 1 (east side A1-P2) opens with the Long Count 9.17.15.0.0 5 *Ajaw* 3 *Muan* accompanied by a full initial series. Blocks M1-Q3 (Figure III.55b) record the dedication of the monument naming it after the "jaguar stone throne/altar" mentioned in the era day text on Quirigua Stela C (Looper 2003:187). The passage also gives an additional descriptive title of the "Paddler Gods" adding (at N2) a **MUYAL-li** or "cloud" designation. The dedicatory passage roughly reads: . . . **K'AL-ja u?-MUYAL-li "PADDLER GODS" BALAM? "THRONE" TUN-ni u?-K'ABA 15 HAAB "carved" TUN-ni** . . . for ". . . bound/dedicated [by the] cloud 'paddler gods' (the) jaguar throne stone (is) its name, (the) 15th tun 'carved' stone . . ."

Episode 2 records the era day passage (Figure III.59). After the monument dedication, the text presumably launches a backward count (R3 to R4—here the glyphs are badly eroded) reaching the familiar era base 4 *Ajaw 8 Kumk'u* (Q5-R5). It then goes on to record that the day does indeed mark the 13th *bak'tun* and the era day event is expressed by a somewhat enigmatic **AT-wa** collocation that may refer to the action of “bathing” (Stuart, Houston and Robertson 1999:169-171; 2011:219) or alternatively “to partner with” (Wald 2007:413-425). The event location (if we trust the Maudslay drawing of the texts by Annie Hunter) are the **CHAN-na CHEN-na** or “sky cave.” The mention of a possible bathing event is similar to the era day passage on page 69 of the *Dresden Codex* (C10-B11) that reads **4 AJAW 8 KUMK'U 5 AT-il ti-HA'**, for “4 *ajaw 8 kumk'u* five bathing (s) in water.” One can only speculate here if these references to bathing do indicate some sort of cataclysmic flood that was somehow presided over by these boatmen called the “Paddler Gods”⁵⁰. Their additional titular reference to “clouds” on Zoomorph G, reinforces their meteorological connection and by association rain (see discussion of these gods in Appendix III of this study).

It is interesting that era day texts are being evoked on what is a death memorial to a beloved king. In the Zoomorph G texts, direct mythological connections are being made between the deceased king and those of primordial origins. In other classic texts from dates of the deceased, a common metaphor for death is *och ha'* for “enter (into) the water.” References to “4 water” and “bathing” on era day may be trying to draw parallels between watery origins and the watery journey of the dead king who emerges out of the maw of the Zoomorph G Jaguar. The connection between death and cosmic origins speaks directly to the role myth plays within traditional societies. It is recalled from Chapter II of the current work, that a major function of myth is to help one face and comprehend the great mystery of life that is death⁵¹. In the case of Zoomorph G, evoking primordial origins may reflect in some manner the dreamlike journey awaited by the living and taken by the deceased—perhaps a rebirth right out of the cosmic jaws of the “waterlily” jaguar and into the realm of the dead.

⁵⁰ The “Jaguar Paddlers” appear as boatmen rowing a canoe on the Tikal bone MT-39 (Mathews 2001).

⁵¹ As Campbell (1990:110) states: “However, there is one more great aspect and function of mythology to be noted . . . to face the mystery of death: to absorb the tremendous mystery of being: for man, like no other animal not only knows that he is killing when he kills but also knows that when he too will die . . . The reconciliation of consciousness with a monstrous thing that is life—which lives on death, terminates in death, and begins with a curiously dreamlike event of a birth—is the function served by all primitive and most high—cultural mythologies . . .”

Possible Era Day References on Quirigua Stela F and Zoomorph P

Quirigua Stela F and Zoomorph P contain back references to era day. In both cases, the scribes are evoking the changing of the altar/pedestal event (without stating the Calendar Round date of era day) and then connecting it to a 4 *Ajaw* dedication date in the historical present. On Stela F the reference to the *jel k'ojob* event is “sandwiched” between two dates 9.15.10.0.0 3 *Ajaw* 3 *Mol* and 9.15.0.0.0 4 *Ajaw* 13 *Yax*. In the case of Zoomorph P the date linked is 9.18.5.0.0 4 *Ajaw* 13 *Kej* the dedication date of the monument. The scribes seem to be replaying the *jel k'ojob* event in commemoration of these Period Endings, as is done on other era day monuments as if to say, “as it was done at start of the era, so it is done on the celebration of the cycle” thereby connecting primordial actions to historical deeds.

III.20 Quirigua Stela F, West Side (B16) — Figure III.61-63

Date of Composition: Late Classic.

Era Text: Stela F, west side, block B16.

Location: *in situ* Quirigua, Grand Plaza.

Photographs: Maudslay (1889-1902: Vol. II, Plate 39); Harvard VIA (2011), Photo Numbers 58-34-20/73903 and 58-34-20/73904 (Peabody Numbers).

Drawings:Looper (2003:126, fig 4.6).

References:Looper (2003:126-128).

Associated Ruler: *K'ak' Tiliw*.

Associated Time Periods: 9.15.10.0.0 3 *Ajaw* 3 *Mol* and 9.15.0.0.0 4 *Ajaw* 13 *Yax*.

Quirigua Stela F (A15-A17)

A15-3 AJAW 3 MOL

B15- sa?-TUN-ni? xu?-ku-pi

A16-10-?-TUN TANLAM-ja

B16-4-wi-ti-?-? JEL-ja k'o-ba

A17- ti 4 AJAW 13 YAX

Transliteration

. . . 3 AJAW 3 MOL sa?-TUN-ni? xu?-ku-pi 10-?-TUN TANLAM-ja 4-wi-ti-?-?
JEL-ja k'o-ba ti 4 AJAW 13 YAX . . .

Transcription

. . . ox ajaw ox mol ? tun xukpi lajun-?-tun tanlamaj chan witi-? je[h]l[a]j k'o[jo]b ti
kan ajaw ox lajun yax . . .

Translation

. . . three ajaw three mol “ended?” ? stone ? “copan?” (on the) tenth? tun it was half-diminished (at) four wit-?-?, it was changed (the) altar/pedestal (on) four ajaw thirteen yax . . .

Commentary

A Possible era day reference exists on Stela F, West Side (Figure III.61 and III.63). As Matthew Looper has previously noted, this portion of the Stela F (A15-A17) text connects the 9.15.0.0.0 4 *Ajaw* 13 *Yax* Period Ending date to 4 *Ajaw* 8 *Kumk’u* era base date (via the era expression without the accompanying Calendar Round), and by doing so likens the historical date “to the primordial reordering of the cosmos” (Looper 2003:127). Yet the era event could just as well be connected to the initial 9.15.10.0.0 3 *Ajaw* 3 *Mol* date, as is suggested by the normal reading order of the text. The era expression (Figure III.62) is immediately preceded by the **TANLAM-ja** half-period completion glyph along with a **4 witi-?-?** collocation indicating a toponym of sorts for a passage reading **TANLAMAJ 4 wi-ti-?-?**, “it was half-diminished [at] four *wit-?-?*” with the **4-WITI-?-?** expression referring to the place where the half-period-rituals of 9.15.10.0.0 3 *Ajaw* 3 *Mol* were celebrated (p.c. Elizabeth Wagner 2011). If correct, it is vital then to understand what the **4-wi-ti-?-?** denotes. Current drawings lack important details and can add no clarification on the matter. A second look at recent photos and the Harvard VIA and Maudslay photographs offer tantalizing “fuzzy” details suggesting a possible **4-wi-ti-WAY-HAAB** reading that may refer to the day 4 *Wayeb*, a date prior to 9.15.0.0.0 corresponding to 9.14.19.8.6 5 *Kimi* 4 *Wayeb*, which falls on February 9, 731 AD (Feb. 5, Julian using the 584,285 correlation factor), which is the precise February nadir at 15° N at Quirigua (p.c. Michael Grofe 2011). Similar expressions found at Copan of 3-*witik* (Altar Q, block D5) and 4 *witik* (Altar G) offer an alternative reading of **CHAN WITIK (WAY?)**, for the place name of “4 *witik* (hole?/cave).” Better and earlier photos with higher detail of the Stela F block B16 will hopefully resolve these speculations. What is important to note in the final analysis is the intent of linking the era event to yet another *k’atun* celebration showing clearly that scribes saw major Period Endings as reflections of cosmic order that was first practiced by the gods at the beginning of the era⁵².

⁵² Its worthy of mention that another possible **JEL** expression exists on the front of Seibal Stela 21 (A3) in conjunction with the 10.1.0.0.0 5 *Ajaw* 3 *K’ayab* Period Ending yet the text is too weathered to verify the reading or comprehend the exact meaning.

III.21 Quirigua Zoomorph P, South Side (M3-M2) — Figure III.64-70

Date of Composition: Late Classic.

Era Text: South text, blocks M3-M2 (read in reverse, left to right, from bottom to top).

Location: *in situ* Quirigua, South-West corner of the ball court plaza.

Photographs: Maudslay (1889-1902:Vol. II, Plate 53, 54, 55, 56, 57); Jesse Nusbaum (2010:photograph 060866).

Drawings: Maudslay (1889-1902:Vol. II, Plate 59); (Looper 1991b:26-27; 2001:27).

References: Looper (2002b; 2007:141-153).

Associated Ruler: “Sky Xul” and *K’ak’ Tiliw*.

Associated Time Periods: Opening Long Count 9.18.5.0.0 4 *Ajaw* 13 *Kej*.

Quirigua Zoomorph P (M3-M2)

M3- JEL k’o-? ti 4 AJAW 13/18 KEJ

M2- T44?-AJAW

Transliteration

. . . JEL k’o-? ti 4 AJAW 13/18 KEJ ? T44?-AJAW . . .

Transcription

. . . *jel k’o[job] ti kan ajaw oxlajun? kej ? T44?-ajaw* . . .

Translation

. . . it is (the) changing (of the) altar/pedestal on four ajaw thirteen? kej T44?-lord . .

Commentary

The Zoomorph P south, mid-text (Figure III.65) is inset into the forehead of the “Principal Bird Deity” (framed in the form of an up-side down T-shaped cartouche with curved scrolls on either side rolling upward). In the center of the forehead is the face of the God of Zero (Stone and Zender 2011:119) wearing a tri-partite headdress of three curls and displaying his diagnostic two finger gesture on each hand. Due to its weathered preservation the text within the cartouche remains largely unread, yet it holds calculations reaching into the deep mythic past (Figure III.68-69). The complicated reading order of this text can be deduced from following the order of the calendar dates and associated Distance Numbers. The opening Initial Series date (Figure III.68a) that begins the south side starts with full Long Count 9.18.5.0.0 4 *Ajaw* 13 *Kej* (blocks A1-C1) and is the dedication date of the monument. It then launches backward in time to the sum of 13 *pik* (block E9 with a very clear **13 PIK-ya u-ti-ya**) from the base date to arrive at the primordial date 4 *Ajaw* 18 *Pax* located at block H1-H2. The vertical position of this

Calendar Round (H1-H2) signals that the text breaks from the normal reading order and is now read in single columns and in a "zig-zag", backward fashion down Column H (H1 to H4) and then successively downward (G1- G4) to where the reader encounters another full Long Count with an Introductory Glyph (at G3— see the Maudslay drawing by Annie Hunter, Figure III.68). This date has a possible Long Count of [12.15.1.0.0?] This Long Count begins in the last three glyph blocks of Column G and then flows leftward, curling upward (to the viewer's left) following the natural curl of the framing scroll in which the text is inserted. From here, calculations become unfathomable due to inscrutable Long Count coefficients and period signs. However, one can say that the normal double-column reading order commences again at the top of Columns I and J where at block I1 there occurs another 4 *Ajaw* date connected to a *jo'tun* Period ending. A Distance Number of perhaps [3.1.0.0.0?] follows (J1-I2) leading to the date 9 *Ajaw* 3 *Sotz'* (I2-J2) where a **TZ'AP-ja** monument erection is recorded. Columns K, then L, read in single column fashion zig-zagging downward toward the right. Like the previous Column F, the bottom of Column L is read downward and then curving upward toward the right by following the upward curl of the scroll border, starting with block M3 and moving to M2; it is here (M3) the scribe records the era expression *jel k'ojob* in conjunction with the possible date of [9.18.5.0.0] 4 *Ajaw* [13?] *Kej* that corresponds to the dedication date of the monument, thus bringing the reader back into firm historical time (Figure III.66-67). If correct, the intent here seems to be that the scribe wants to connect the era event to the celebration of the 9.18.5.0.0 Period Ending and demonstrate a numerological connection between the two 4 *Ajaw* dates, with one primordial and the other historical.

III.22 Tikal Bone MT-27 (A1-A2) from Temple 1, Burial 116 — Figure III.71

Date of Composition: Late Classic.

Era Text: blocks A1-A2.

Location: Tikal Temple 1, Burial 116, MT-27.

Archive: Tikal, Morley Museum.

Drawings: by Andy Seuffert in Moholy-Nagy (2008:fig 196b).

References: Trik (1963); Satterthwaite (1963; 1964);Looper (2002a); MacLeod (2008); Grofe (2007:71); Moholy-Nagy and Coe (2008:61).

Associated Ruler: *Jasaw Chan K'awiil*.

Associated Time Periods: The MT-27 bone possibly records a time span of 52 years or 18,733 day-interval (Grofe 2007:71).

Tikal Bone from Temple 1, Burial 116, MT-27 (A1-A6)

A1-4 AJAW 8 KUMK’U

A2-4 BEN 1 XUL?

A3-5 BEN

Transliteration

4 AJAW 8 KUMK’U

4 BEN 1 XUL?

5 BEN . . . ?

Transcription

kan ajaw waxak kumk’u

kan ben jun xul

jo’ ben . . .

Translation

four ajaw eight kumk’u

four ben, one xul

five ben . . .

Commentary

Burial 116 from Temple I produced a bundle of one hundred and forty nine inscribed and plain animal bones; the set lay the near the right foot of a royal corpse, the remains of which are thought to be those of the king *Jasaw Chan K’awiil* (Martin and Grube 2000:47). The bones lay tightly clustered (Figure III.74) indicating that they were most likely deposited in a now-perished container (Moholy-Nagy and Coe 2008:61). Forty two of the bones were inscribed with single rows of hieroglyphs and images. Many of the texts have no apparent connection between bones, yet several can be laid out vertically, side-by-side and read in single columns as a continual text; this is especially true for bones MT-31 through MT-37 that record the deeds of *Jasaw Chan K’awiil’s* ancestors. As Grube and Martin (2000:II-28) noted, these six bones record the life and times of *Siyaj K’ak* and *Yax Nuun Ahiiin* spanning a period between 8.16.13.0.6 9 *Kimi* 9 *Sak* (369 AD) to 8.17.2.3.16 4 *Kib* 14 *Kej* (378 AD) and where these rulers are said to have performed a “conjuring” and “descent” from various localities. As Moholy-Nagy and Coe (2008:61) state:

Viewed as a group these artifacts gave the impression of a long illustrated text with pictures. In shape and size they resembled books of inscribed bamboo splints from China that were place in burials.

The texts not only recorded the deeds of the dynastic founders, but the life, times, and deaths of various gods. Also two of the bones, MT-26 (Figure III.72a-b) and MT-27 (Figure III.71) record counts of three dates. It is very likely that all these texts are

secondary writings copied from a primary source like a codex (Satterthwaite 1963:19) ⁵³. Altogether, the bones contain information the king needed to reference historical events of his ancestors, patron gods, auguries and astronomical cycles. The reason for the apparent disjunction between texts is that possibly different passages originate from different source books.

The bone MT-27 is inscribed with three Calendar Round dates (Figure III.71). The first is a Calendar Round is famously associated with era day date 4 *Ajaw* 8 *Kumk'u*. The second day is possibly 4 *Ben* 1 *Xul* ⁵⁴ which is then followed by the partial third Calendar Round of 5 *Ben* with the *haab* portion of the day name missing ⁵⁵. Of course, the three dates inscribed on MT-27 could be located within any 52 year Calendar Round and do not necessarily correspond to the era base date. What makes the presence of the 4 *Ajaw* date suspiciously “primordial” in character is the interpretation of two bones that lay close by, those of MT-27; MT-29, MT-30A and MT-26. Inscriptions on these four bones have direct mythic connections. MT-29 (Figure III.73c) shares two of the same Calendar Round day names (4 *Ben* and 5 *Ben*) while offering an additional Calendar Round of 6 *Ben* 11 *Sotz'*. All three dates on MT-29 are seemingly separated by sum of days divisible by 3 *tuns* (4 *Ben* 1 *Xul* + 3 *tun* = 5 *Ben* 6 *Tzek*; 5 *Ben* 6 *Tzek* + 3 *tun* = 6 *Ben* 11 *Zotz'*) and recall events about the life and death of the God of the Number Three (also known as the God of Song and Flowers; see Taube 2004:73; Houston et al. 2006:156) who is the Patron of the Month *Mak*. MT-30A (Figure III.73a-b) also elaborates on the life of the God of the Number Three; the hollowed out bone with a flared end that carried the text, could have originally been used as a flute (the upper finger holes and mouth piece now missing), and if so, the flute (an instrument of song) complements the subject of the inscribed text. The three inscribed 3-11 *Pik* dates on the adjoining MT-26 can be related to a reconstructed 3-11 *Pik* almanac whose base date is the era date (MacLeod 2008). Therefore, two of the adjoining bones to MT-27 were sourced in mythic deeds and another contains a calendar cycle that is anchored on the era date. Even so, these mythic

⁵³ Stuart (1995:157) discusses the likelihood of such codices and what they would have contained: “Doubtless, primary documents more important than the monuments, were the codices. It is of all things likely that scribes who wished to record an event in the life of a long dead king could look up essential information, including, specific verbs, and auguries, in a codex.”

⁵⁴ The *xul* reading is in doubt since the head is missing its typical /-ni/ suffix.

⁵⁵ Grofe (2007:70-71) sees the time interval between the first two dates (the 4 *Ajaw* and the 4 *Ben* dates) on MT-27 as equaling 52 *tuns* plus 13 days or 18,733 days with the 13 days acting as a ‘leap day’ correction every 52 *habs*. Yet this time span of 18,733 days does not seemingly correspond to the third date of 5 *ben* which needs a span of 18,733 days plus an additional 40 days (and not 13) to be reached.

associations, however strong, are not proof enough to fix the MT-27 passage to the era date and so its affiliation to era day remains in doubt.

III.23 “Tila” Stela A (A7-B10) — Figure III.75-76a-b

Date of Composition: Late Classic.

Era Text: blocks (A7-B10).

Location: The provenance of “Tila” Stela A is not well understood and therefore it is catalogued by Mayer (1991) as of unknown provenience⁵⁶.

Archive: A fragment of Stela A is in the Tuxtla Gutierrez Museum while another fragment is in the Museo Rufino Tamayo in Oaxaca (Mayer 1991:62-63).

Photographs: Mayer (1991:plate 206, 223, 224).

Drawings: Beyer (1927:124, fig. 1); Marcus (1984:115); Schele (1992:124).

References: Beyer (1927); Schele (1992:124), Mayer (1991:62-63, plate. 223, 224, 225).

Associated Ruler: *Aj Ihk’-?-Chij*.

Associated Time Periods: opening Long Count 10.0.0.0.0 7 *Ajaw* 18 *Sip*.

“Tila” Stela A (A1-B10)

A1- ISIG “PATRON OF THE MONTH SIP”	B1-10 PIK
A2-[missing]	B2-[missing]
A3-[missing]	B3-[missing]
A4-7 AJAW	B4-“G9”-ni
A5-u-TI’-HUN-na-li	B5-18 SIP
A6-10 PIK-ki-ya	B6- u-ti-ya
A7-4 AJAW	B7-8 KUMK’U
A8- ya-AT’-ji	B8-“PADDLER GODS”
A9- NAH-5-CHAN-AJAW	B9- aj-T174-“PAINT POT?”-lo-lo-chi-ji?
A10-“PIERCED FLOWER [T653/T582]”-?	B10-“TILA EG?”-AJAW
TI’-“SKULL?”-?-li?-ni?	

⁵⁶ The name given to the monument is derived from the name of the modern settlement in whose outskirts it was found. It was first fully discussed, drawn and commented on by Hermann Beyer (1927) and later Blom et al. (1926) who wrote that it was discovered near the outskirts of Tila, a town located in the state of Chiapas and within the *departamento* of Palenque (Beyer 1927). Fortunately, the monument ended up in the hands of the priest Don Eleazar Mandujano who safeguarded the stone. Fragments of Stela A, are currently in the Museo Rufino Tamayo in Oaxaca and its companion piece (Tila Stela B) now resides in the Tuxtla Gutierrez Museum (Mayer 1991).

Transliteration

ISIG “PATRON OF THE MONTH SIP” 10 PIK . . . 7 AJAW “G9”-ni u-TI’-HUN-na-li 18 SIP 10 PIK-ki-ya u-ti-ya 4 AJAW 8 KUMK’U ya-AT?-ji “JAGUAR PADDLER GOD STINGRAY PADDLER GOD” NAH-5-CHAN-AJAW yi-IL-ji aj-T174-“PAINT POT?”lo-lo-chi-ji? “PIERCED FLOWER [T653/T582]”-? TI’-“SKULL?”-?-li?-ni? “TILA EG?”-AJAW

Transcription

ISIG lajun pik [mih winikhaab mih haab mih winik mih k’in] wuk ajaw “G9”-ni u ti’ hunal waxaklajun sip lajun pik[i]-ji[y]? u[h]ti[ji]y kan ajaw waxak kumk’u yat[a]j “paddler gods” nah jo’ chan ajaw yil[i]j_aj-sibik? lol chij? “pierced flower”-ti’ “skull?”-lin?- “Tila EG?” ajaw

Translation

ISIG⁵⁷-ten pik [zero winikhaab zero haab zero winik zero k’in] seven ajaw, “G9” edge (of the) book eighteen sip, ten pik earlier (on) four ajaw eight kumk’u, (they) have companioned?/bathed? (the) “paddler gods” (the) nah jo’ chan lord(s), he has seen it, he of (the) black? ink(ed)? deer? (at the) “pierced flower”- ? (place), (the) “tila?” lord

Commentary

Stela A was broken into several pieces with only top and lower parts surviving. These two parts frame a vertical text consisting of two columns and twenty glyphic blocks (Figure III.76). Enough detail remains to reconstruct the opening Long Count (B2-B5) as 10.(0.0.0.0) 7 Ajaw 18 Sip (Beyer 1927). After the recording of the “Lord of the Night” cycle as G9 and the haab date, the text then immediately proceeds to count backward a full 10 *bak’tuns* to the era date 4 Ajaw 8 *Kumk’u* (Figure III.75). Here we have an explicit example of a *bak’tun* commemoration followed directly by a count back in time to the era base. The “Tila” scribe does not quote the standard “altar/pedestal changing” episode, but rather notes that the “Paddler Gods” of the *Nah Jo’ Chan Ajaw* are present, two gods who are often pictured emanating from clouds⁵⁸. The gods participate in a possible “bathing” ritual (Stuart and Houston 1999:169-171; 2011:219) or that they are “joined/partnered” (Wald 2007:413-425). In the case of the latter possibility, perhaps what is being “joined” are the two calendar Long Counts of the 10th and the 13th *bak’tun*.

⁵⁷ ISIG stands for Introductory Series Introducing Glyph.

⁵⁸ As Jimbal Stela 1 and Ixlu Stela 2 attest, **MUYAL** cloud scrolls coil around these gods as they float above rulers performing various rites; Jimbal Stela 1 reinforces this cloud-rain association by adding to their name captions that of the rain god—the appellative is expressed as *Nah Jo’ Chan Chaak* (Stuart et al. 1999). On Quirigua Zoomorph G gives additional descriptive title of the “Paddler Gods” (N2) as **MUYAL-li** or “cloud,” therefore reinforcing their meteorological connection.

Finally the text finished the passage by noting that 10th *bak'tun* and the era day were witnessed by what seems to be a historical personage *Aj Ihk'Sibik? Lol Chij?*, presumably a Lord from “Tila” and whose emblem glyph (B10) remains undeciphered. The place where he witnessed the event might be given at block A10, which describes a probable locale initially denoted by a “Pierced Flower” logograph (T653/T582).

III.24 Tonina Monument 34 (pC-pM) — Figure III.80-81

Date of Composition: Late Classic.

Era Text: pC-pM?

Location: Tonina.

Archive: Tonina site museum.

Photographs: Graham and Mathews (2004:6-81); Skidmore (2011:photo archive ID number 1893).

Drawings: Graham and Mathews (2004:6-81); Stuart (1995:181).

References: Graham and Mathews (2004:6:81); Pharo (2006:440); Ayala (1995:153); Stuart (1995:168).

Associated Ruler: Tonina Ruler 8 (Martin and Grube 2000:188).

Associated Time Period: 9.18.5.0.0.0 4 *Ajaw* 13 *Kej*.

Tonina Monument 34 (pC-pM)

pC-8 KUMK'U

pD-?-?-chi-la?

pE-“PADDLER GODS?”

pF-?

pG- AJAW-wa?

pH-? NAH-5-?-?

pI-?-18?-?

pJ-?

pK-? 4 AJAW?

pL-13 KEJ NAH 5 TUN-ni?

pM-u? CHOK ?

Transliteration

. . . 8 KUMK'U ?-?-chi-la? "PADDLER GODS?" ? AJAW-wa? ? NAH-5-?-? ?-18?-? ? ? 4 AJAW? 13 KEJ NAH 5 TUN-ni? u? CHOK ? . . .

Transcription

. . . [kan ajaw] waxak kumk'u? [yi]chnnal]? "paddler gods?" ? ajaw ? nah jo' ? ? waxaklajun-? ? ? kan ajaw oxlajun kej najo'tun u chok? . . .

Translation

(four ajaw) eight kumk'u in the company? (of the) "paddler gods" ? lord ? nah jo' (chan)? ? ? eighteen-? ? ? four ajaw thirteen kej nah jo'tun (period ending) his scattering? . . .

Commentary

Monument 34 (Figure III.80-81) like Quirigua Altar P', wants to connect the era day celebration to a 9.18.5.0.0 4 *Ajaw* 13 *Kej* Period Ending celebration. As a circular altar it is by no means a unique but rather was part of program of round flat stone disks that were carved to commemorate *tun* and *k'atun* Period Endings at Tonina. Typically the center point of these type of altars displays the date in large scale of commemoration with a 260-day sign inside the Day Sign Cartouche. Scribes carved the top perimeter edges with the dedication text and associated events. A clear example of this altar style is Monument 110 (Figure III.82) which celebrates a half *k'atun* Period Ending. Its central glyph displays a giant 5 *Ajaw*, a date that is referenced in the rim text (A-I) as 9.14.10.0.0 5 *Ajaw* 3 *Mak*. On this same Monument 110, aside from the mention of Ruler 4's event commemoration (block J), the text ends with a reference to the oversight by the "Paddler Gods" (block Q) and a tentatively deciphered verb (at Block P) that in general means "to partner with" (Wald 2007:414) or "to bathe" (Stuart and Houston 1999:169-171; 2011:219)⁵⁹. It will be remembered that the "Paddler Gods" are also evoked at the start of the era as is recorded on Quirigua Stela C and Altar P', Tila Stela A and Piedras Negras Altar 1. These gods were present at the start of the era and appear again to commemorate *tun* anniversaries. David Stuart (1995:168) interprets the inscription on Monument 34 as follows:

The text . . . is dedicated on the date 4 Ahaw 8 Cumku (9.18.5.0.0.0) [and] makes a deliberate backward reckoning to the beginning of Maya time on on 4 Ahaw

⁵⁹ The "Paddler Gods" are invoked regularly at Tonina (see Monuments 69, 134,139; Ayala 1995:347).

8 Cumku (13.0.0.0.0). The huge “4 Ahaw” glyph in the center of the altar establishes the connection at a glance.

As Stuart notes, the commemoration of a 260 day anniversary with another in the deep past is part of a “patterned history” where the Calendar Round dates from the present are linked to those to the remote past; this produces a narrative quality where the “text is designed to provide background and context for the particular event being celebrated” (Stuart 1995:167-168). On Tonina Monument 34 the thematic link is the celebration of the 4 *Ajaw* era day event with a plausible “scattering” event that takes place on 9.18.5.0.0 4 *Ajaw* 13 *Kej* at Tonina. Once again the “Paddler Gods” may be recorded in the era day inscription (Block pE) since they are most likely custodial gods during era day and the later historic rites.

III.25 Tonina Monument 150 (A1-B8) — Figure III.77-79

Date of Composition: Early Classic (dated paleographically by glyph style see

Era Text: A1-B8?

Location: Tonina.

Archive: Tonina site museum.

Photographs: Graham and Mathews. (2004:9:84); Skidmore (2011:photo archive, ID number 9270 and 9271).

Drawings: Graham and Mathews (2004:9:84); Ayala (1995:341, Fig 70b).

References: Graham and Mathews (2004); Bíró (2008:105-106).

Associated Ruler: The monument (see similarities to Tonina Mon. 168) was erected during the reigns of ruler 2-4 sometime late 6th or early 7th century (p.c. Carlos Pallan 2008). The Ruler named is *Chak ?-n Kuy, K’uh Po’? Ajaw*, who is the 12th successor of *Ox Nah*.

Associated Time Periods: None.

Tonina Monument 150 (A1-B8)

A1-4 AJAW	B1-8 KUMK'U
A2-TZUTZ-yi-ya	B2-3-PIK-TE
A3-T739?-WITZ	B3-ta-1-K'IN-ni
A4-TZUTZ-yi	B4- u-KAB-ji-ya
A5-CHAK?-na	B5-ku-yu
A6-K'UH-po?-AJAW	B6-u?-12-TZ'AK-bu-li
A7-3-NAH-?	B7-K'UH-K'IN-NAL
A8-u-ti	B8-TI'??

Transliteration

4 AJAW 8 KUMK'U TZUTZ-yi-ya 3-PIK-TE' T739?-WITZ ta-1-K'IN-ni TZUTZ-yi u-KAB-ji-ya CHAK?-na ku-yu K'UH-po?-AJAW u?-12-TZ'AK-bu-li 3-NAH-? K'UH-K'IN-NAL u-ti TI'?? . . .

Transcription

*4 ajaw 8 kumk'u tzutz[u]yi[ji]y ox pik te' ?-witz ta jun k'in tzutz[u]y ukab[i]jiy
chak ?-n kuy k'uh[ul] po? ajaw u tz'akbul ox nah ? k'uh[ul]?nal
u[h]t ti'-? . . .*

Translation

(on) four ajaw eight kumk'u is finished back then 3 pik te' (at) T739?- “resplendent cleft” mountain, (on) one/first? sun/day, it is finished, (it) was tended back then (by) chak ?-n kuy, divine po'? lord, (the) twelfth successor of ox-?- nah, divine ? place, it happens at (the) edge (of) ? . . .

Commentary

After the opening date 4 *Ajaw* 8 *Kumk'u* on Monument 150 (Figure III.77-78) a second event is recorded. It is the completion of the possible count called the **3 PIK TE'**⁶⁰. This event is said to occur at a place indicated by a toponym (A2) consisting of “T739- ‘cleft’-mountain”⁶¹. The recording of a numerical count at the start of the era is not surprising to see and is similar to other counts where era day serves as the start date for a

⁶⁰ Alternatively the **3 PIK TE'** could be an obscure reference to the 819 Day Count that started only 3 days before the era date on 1 *Kaban* 5 *Kumk'u* (with the **3 PIK TE'** denoting the three elapsed days in the count). The presence of Glyph Y, the T739 “squashed toad” logograph at block A3 (p.c. Michael Grofe 2010) may be a further indication that the 819 day cycle is intended.

⁶¹ The “cleft-mountain” at block A3, has T24 logograph insets (Figure III.79) that are similar to other depictions of split mountains (Tonina monument 160 and 106) and is a popular mythic toponym often associated with the emerging Maize God who is pictured rising out of the split mountain.

calendar cycles (e.g. the Long Count, and the nine “Lords of the Night cycle”⁶². Péter Bíró (2008:105) rightly points out that the *tzutz-* verb root “to finish, to complete” (A2), stands with the *-ijiy* deictic clitic (Wald 2000, 2004), indicating that the event happened not recently, but in the distant past. So, it can be argued that the event indicated by the temporal clitic is not a recent turn of events but one that which took place in the deep past during the era date.

At blocks B3-A4 (Figure III.79) there is an enigmatic reference to a single day count “on one/first day it was finished.” This may be reaffirming that the **3 PIK TE’** cycle is indeed terminated “on first day” yet the phrasing is quite odd and does not follow the standard syntax rules⁶³. The mention of one/first sun in conjunction with an era day passage is interesting given the fact of the proximity of the era date with the second solar zenith (Merrill 1945; Malmström 1973;1978) on August 14th two days later (at a latitude of 15 ° N). A reference to the solar zenith is an intriguing thought but highly speculative.

The noble who oversaw the closing of the count was “*Chak-?-n Kuy K’uh Po?* Lord, the 12th Successor of *Ox Nah?*” Presumably, the ruler *Chak ?-n Kuy* is unknown from Tonina or any other era day texts, although he is most likely a historical personage from the city. The *tz’akbul* title he employs is used by historical rulers who proclaim their descent from a founding ancestor (or god) and he announces that he is the “12th successor” of a place named *Ox Nah?* Secondly, *Chak ?-n Kuy* has an emblem glyph which slightly resembles the Tonina emblem glyph (Bíró 2008:115).

Tonina Monument 150 text presents quite the enigma. There is still no way given the present information to positively equate the passage to era day. In general, the Calendar Round date 4 *Ajaw* 8 *Kumk’u* could refer to a single date with the same name within a fifty two year Calendar Round cycle. Without a connecting Distance Number or mythic identification of a parallel event, god, or place name, one can only speculate on its relevance to the era base date. Therefore, Monument 150 can not be considered to hold an era day text.

⁶² Another such obscure count was recorded on Tikal MT-27 from Burial 116 potentially relating a cycle of 52 *tuns* plus 13 days (Grofe 2007:70).

⁶³ Considering that epigraphic Mayan is verb initial, one expects syntactically that the verb *tzutzuy* should precede the mention of the *jun k’in*, yet it does not.

III.26 The “Yax Wayib” Mask (A1-F6) — Figure III.83-88

Date of Composition: Early Classic circa 445 A.D. (Zender n.d.).

Era Text: blocks A1-F6?

Location: now in a private collection, Santa Fe, New Mexico.

Photographs: Van Stone (2010:52-53).

Drawings: Carrasco (2005:fig 52; 2010:614); Houston et al. (2009:fig 2.3); Van Stone (2010:53).

References: Zender (n.d); Carrasco (2005:464-466); Stuart (2005b:166); Houston et al. (2009:38); Van Stone (2010:52-53).

Associated ruler: See glyph blocks F1-E3 for title of possible historical ruler.

Associated Time Periods: Unknown.

“Yax Wayib” Mask (A1-F6)

A1-4-AJAW

B1-?-ya

A2-TI'-CHAN-na

B2-YAX-“THREE-STONE”-NAL

A3-1-“GI”

B3- YAX WAY-bi

A4- CHAAK

B4-HUL-ya

A5- SAK-“BONE-FLOWER”-NAL

B5-?-bi-TUN?

A6- CHAN-na-la

B6- K'UH

C1- KAB

D1- K'UH

C2- u-KAB-ji

D2-?

C3-che?-?-ta

D3-?

C4-“GOD D”

D4-PRINCIPAL BIRD DEITY”

C5-UHT-ti

D5-WAK-CHAN-na AJAW

C6- ha-i

D6- u-KAB-ji

E1-MIHIN

F1- to?

E2-u-ma-ma

F2-?

E3- to-ka-KAN-ni-li

F3-bo'-ja

E4- u-BAH

F4-SAK T533

E5-ko-mu-tu

F5- CHUM?-mu-le?

E6-“God E”-ja

F6-“God E”-ja “Goddess O”?/NAH?

Transliteration

4-AJAW ?-ya TI'-CHAN-na YAX-"THREE-STONE"-NAL 1-"GI" YAX WAY-bi
CHAAK HUL-ya SAK-"BONE-FLOWER"-NAL ?-bi-TUN? CHAN-na-la K'UH
KAB K'UH u-KAB-ji che?-?-ta ? "GOD D PRINCIPAL BIRD DEITY" UHT-ti
WAK-CHAN-na AJAW ha-i u-KAB-ji MIHIN to? u-ma-ma ? to-ka-KAN-ni-li bo'-
ja u-BAH SAK T533 ko-mu-tu CHUM?-mu-le? "God E"-ja- "Goddess O"?/NAH?

Transcription

*kan ajaw ? ti' chan yax-"three stone"-nal jun "GI" yax way[i]b chaak hul[i] sak "bone-
flower"-nal ?-bi[h]tun chanal k'uh kab[al] k'uh ukab[a]j k'e? wa?-chit? winik-?
"itzamnaj" "principal bird deity" uht wak chan ajaw ha'i ukab[a]j mihin to-? u mam
tokakanil bo'j u bah sak T533 ko[k]mut chumel? "maize god moon goddess"*

Translation

four ajaw "event" (at the) sky edge new "three stone" place (by the god) "GI", the yax wayib chaak, (they) arrived (at) the white-"bone-flower"-place pavement?, the sky god (and) earth god, he has tended it . . . itzamnaj, (and) it happens (at) wak chan ajaw, it is he (who) has tended it, the child of ? (and the) grandson of ? tokanil ?, (it) was carved? (it is) the image for (the) white T533 kokmut, enthroned deceased maize god-moon goddess

Commentary

The "Escuintla Mask" (Zender n.d), also known as the "Yax Wayib" Mask (Carrasco 2005:464), is a green stone mask with an unknown provenance (Figure III.83-85). The style of the text declares it to be from the Early Classic Period. Paleographically speaking the style of the **U BAH**⁶⁴ glyphs (E4) as well as the "wispy" lines of the /-ya/ suffixes (B1) are diagnostic of Early Classic script (Figure III.86).

As Van Stone (2010:52-53) points out, the "Yax Wayib" Mask shares a strong similarity in glyphic style and carving to a green stone fuchsite mask (Figure III.89-90) with a carved text on the back (Coe 1997:44) belonging to a ruler *Sak Balam* from Río Azul, who according to Stela 1 of the site, was alive in 392 AD (Adams 1999:216). Comparing the "Yax Wayib" to the *Sak Balam* Mask, aids in better identifying features from each and strengthens the case that the provenance of both are indeed the same. The carved face on the *Sak Balam* Mask (Figure III.89-90) possess features attributable to the deity known as GI: the large Roman nose, a "buck-tooth" jutting from the lips, a round eye with inset upper curls, a fish "barbel" emanating from the corners of the mouth, a

⁶⁴ See glyph blocks on Tikal Stela 31, M1 and the Uaxactun Mural in Structure B-XIII for similar **BAH** variants (Proskouriakoff 1968:248).

large “shell” ear ornament and a “quadripartite bowl” (Robertson 1974b; Schele 1976; Stuart 2005b:164-166) for a headdress topped by central “stingray spine” and a spondylus shell and a cross-bands “floral” sign. The “Yax Wayib” Mask (Figure III.83-84) is similar in execution and style but it displays a face that is a fusion of characteristics from two gods: GI and *Chaak* (p.c. David Stuart 2006); it has the same large Roman nose, and a “buck-tooth” jutting from the lips and a “fish barbel” curling from each side of the mouth, and its large round eyes are cut by an upper curl. Instead of wearing the “quadripartite bowl” atop the head, it wears a *Chaak* headdress with the “Yax Wayib” logograph as its central emblem (Figure III.84a-b). The fusion of these godly features is also related by the name phrase that GI carries on the back of the “Yax Wayib” Mask (A3-A4). It weds the gods’ names together as “GI *Yax Wayib Chaak*.” The god’s theonym reflects the iconographic features carved on mask front. Similarly, the text on the back of the *Sak Balam* Mask pairs GI’s name with the “quadripartite bowl” (A1-B1). Again, the title relates directly to the features portrayed on the front of the mask. Thus, the execution in carving and rendering glyphic names is very similar between these two masks, giving rise to the possibility that both might have originated in a related workshop near or at Río Azul. Lastly as grave goods, these two objects were most likely used as funerary masks, perhaps even death masks for the deceased or mummy bundles. The epitaph to *Sak Balam*’s death on the *Sak Balam* Mask (blocks A2 and B5) supports the link to funerary ritual. On the “Yax Wayib” Mask, the mention of the *Sak* T533 (F4) in combination with a “deceased” Maize God (E6) in a title for the Mask’s owner are highly suggestive of a death connection as well.

At the start of the “Yax Wayib” Mask text GI is the first of three gods associated directly with the 4 *Ajaw* era date (Figure III.86). GI is the protagonist of an undeciphered action stated at block B1. The event takes place at the familiar “sky edge, new ‘three-stone’ place.” Other Late Classic era texts also affirm GI’s presence; Palenque’s Temple of the Cross retells how GI “descends from the sky” and vases K2796 and K7750 indicate that he is one of several gods who are “ordered” within the court of God L (Stuart 2005b:166). In all three cases, GI plays a primary role in participating in the first day’s events. One must keep in mind that it is not just GI who is said to appear but “GI *Yax Wayib Chaak*.” GI is pictured in the guise of *Chaak* as he wears the *Chaak*’s headdress that is studded with the **WAYIB** logograph (Figure III.84). The merging of two names might involve a case of “theopolymorphosis” such as Boot (2009b) describes is

“the complete merging of two or more gods to create a different supernatural entity.” Alternatively, the deity may in some way be a *way* or spirit companion of *Chaak*.

The next to arrive at the scene (at a new locale mentioned at block A5 as **SAK-“BONE FLOWER”-NAL**) are the Sky God and Earth God who correspondingly are mentioned on the vases K2796 and K7750 (Figure III.86-87). The mythological locale mentioned at block A5 (a T627 “flowery” place name infixed by a possible T571 “bone” glyph) is perhaps similar to a name found within the title of the Río Azul Lord *K’inich Lamaw Ek’* (Figure III.91) painted on K5022 (Matteo 2007), although in this case, the collocation could refer to a *tok’ pakal* title (p.c. Sebastian Matteo)⁶⁵. Continuing with the text (Figure III.87) the day’s activities are overseen by God D whose name is paired with his avian manifestation the “Principal Bird Deity” *Yax Kokaj Mut* (Boot 2008b:12-13). Correspondingly, God D is one of the primary gods mentioned on the Quirigua Stela C era day text that set up the third of three stone altars/thrones. Also, like on Quirigua Stela C text, the mask text indicates (C5-D5) that all three events (GI’s actions, the Sky God-Earth God arrival, and the dutiful oversight by God D) are said to take place at the *Wak Chan Ajaw*. These parallel gods, events and place names directly correspond to other mythic texts found at late Classic sites Palenque, Naranjo and Quirigua. Therefore, the mythological corollaries of the “Yax Wayib” Mask to those of Late Classic era day texts strengthens the case of a shared mythos that stretched over time between these geographically wide-ranging cities.

Blocks C6-E3 declares that the aforementioned mythic events are overseen by what is very likely the owner of the mask (Figure III.87-89) With the use of the *ha’i* focus marker, the text is emphasizing that it is the historical figure named in the text who is “overseeing” the actions of era gods (p.c. Péter Bíró 2009). The owner offers a parentage statement mentioning first his father and then possibly his grandfather. The text at block F3 may be the rare verb *bo’j*, “to carve” (p.c. Péter Bíró 2009) and is in reference to the mask carving. Next the **U BAH** at E4 indicates what is being carved, “his image . . .” The person for whom the object is carved carries a long title. The first part of the title says it is “his image (the) white T533 *kokmut*.” In Maya iconography, the T533 sign represents a seed or flower from which maize sprouts emerge, and the *Sak* T533 combination is also commonly used as a death epithet to indicated expired breath (p.c. Barbara MacLeod

⁶⁵ The situation is similar to Palenque’s Temple of the Cross inscriptions where its written that GI “descends” on era day and shortly thereafter on another day takes possession of the *Wak-?-Chan Xaman Waxak Nah*— a mythological house that shares the same name of the Temple of the Cross inner sanctuary Schele and Freidel (1990:246) .

2010). The *kokmut* may refer to a type of bird (*mut* is a common name for a bird; p.c.Erik Boot 2009). Finally, the last three glyph blocks (F5-F6) extend the title even more with “the sat/enthroned deceased Maize God-Moon Goddess”⁶⁶. The portrait of the Maize God with a closed eyelid in this case is indicative of death. In total, the final phrase reads: “his image, the white T533 *kokmut*, enthroned deceased Maize god-Moon Goddess.” It is a title that very likely references the mask’s owner. The mention of a T533 seed with a deceased Maize God in a personal title is a fitting description of the tomb’s occupant; who like a seed, was planted in the ground to follow the same path of the resurrected Maize God.

III.27 Kerr Panel 6593 (A2-A5) — Figure III.92-93

Date of Composition: Late Classic?

Era Text: blocks A2-A5.

Location: the site of Chancala?

Archive: now at LACMA.

Photographs: Mayer (1991:19, plate 96); Kerr (2011) as the Kerr Panel 6593.

Drawings: Freidel et al. (1993:66, fig. 2:3).

References: Mayer (1991); Freidel, Schele and Parker (1993:65); Zender (2003); Stuart (2011b).

Associated Ruler: *Chak K’uh Ajaw*.

Associated Time Periods: possible opening date [12.19.19.02.0. 9 *Ajaw*] 8 *Woh*; at the end of the passage the 9.0.0.0.0 [8 *Ajaw* 13 *Kej*] Period Ending.

Kerr Panel 6593 (A2-A5)

A1-.8 **WOH**

B1-0 [K’IN] 16 WINIK-ji-ya

A2- i-u-ti

B2-4 AJAW

A3-8 KUMK’U

B3- yi-IL-la-ji-ya

A4- YAX k’o-jo

B4- a-AHK

A5- CHAK K’UH AJAW

B5-9 TUN/PIK-ya i-u-ti

⁶⁶ Kaufman and Norman (1984:107) again consider the “possibility” that the (pre-) proto-Ch’olan intransitive completive positional marking could have been /-le/. Thus, one could interpret the spelling at block F5 as **CHUM-le-ø**, “he/she/it sat” (p.c. Sven Gronemeyer 2012).

Transliteration

... 8 WOH 0 [K'IN] 16 WINIK-ji-ya i-u-ti 4 AJAW 8 KUMK'U yi-IL-la-ji-ya YAX
k'o-jo a-AHK CHAK K'UH AJAW 9 TUN/PIK-ya i-u-ti ...

Transcription

... waxak woh mih [k'in] waklajun winik[i]jiy iu[h]t kan ajaw waxak kumk'u yilajiy yax
k'oj ahk chak k'uh ajaw bolon tun/pik iu[h]t ...

Translation

... eight woh, zero k'in (and) sixteen winik since then, then it happens (on) four ajaw
eight kumk'u he has seen it back then, yax k'oj ahk chak, lord of k'uh, (the) nine tun/pik
since then, then it happens ...

Commentary

If the era date is intended on Kerr Panel 6593, the first date at the top of the panel (Figure III.92-93) at block A1 (the *Tzolk'in* of the day name is omitted) likely counts 16 *winals* forward from the reconstructed date [12.19.19.2.0 9 Ajaw] 8 Woh to arrive on the date (13.0.0.0.0) 4 Ajaw 8 Kumk'u located at blocks B2-A3. At the end of the inscription (B5), it then leaps forward in time a possible nine *tun* or nine *bak'tuns*.

The verb at B3 and how to interpret the glyphs that follow has been the source of debate. Linda Schele and Freidel et al. (1993:65) believed that the collocation directly following the verb at block A4, spelled **YAX k'o-jo** for “great/new image.” Furthermore, Schele stated that the *Ahk Chak K'uh Ajaw* (B4-A5) entity named the “image” as a cosmic turtle (from whose cracked carapace the Maize God is often seen emerging); in Schele's translation (following older conventions of epigraphic Mayan) the passage (B3-A5) read “*ilahi yax k'oh ak chak k'u ahaw* [for] was seen, the first turtle image, great god lord” (Freidel et al. 1993:65).

Later Mark Zender (2003) commented on the verb at block B3 noting that in this instance the /*yi-*/ sign (located in the eye) is conflated with the **IL** logograph, which indicates a “possessed noun or a transitive construction, not a passive construction as Schele had previously supposed” (Zender 2003). Zender concluded that the inscription seems to have little direct bearing on the creation narrative, and probably references a historical event in the life of the *Chak K'uh* monarch named *Yax K'oj Ahk*. According to Zender the *Yax K'oj Ahk* is the agent of the passage and a historical personage rather than mythical being. What may have led Zender to his conclusion is the knowledge of inscriptions bearing the *Ahk* title with the same accompanying emblem glyph of **CHAK**

K’UH AJAW occurs on two other monuments: the Dumbarton Oaks Relief Panel 4 (Figure III.94) and an inscribed monument fragment in England from the Guy Dixon Collection (Figure III.95). The Dumbarton Oaks Relief Panel 4 gives the name “. . . **aj-ku CHAK K’UH-AJAW** . . .” The Guy Dixon fragment (a single glyphic column of what once must have been once a double column of glyphs) records again the title . . . **CHAK K’UH-AJAW**. So there is a strong likelihood that a noble named **AHK** of kingdom **CHAK K’UH-AJAW** is not the cosmic turtle after all but in fact a historical ruler.

David Stuart (2011b) has also weighed into the argument agreeing with Zender’s analysis while commenting on the verb’s derivation:

However, a closer look at the glyphs clearly shows that this verb takes the initial sign yi-, infixed into the main eye main sign. This would spell the ergative third-person pronoun (u)y- before the initial i-of ilajiiy, meaning that it cannot be a passive verb construction (intransitives, unless they are nominalized, can never take an ergative pronoun prefix). Yilajiiy is well known in ancient texts, functioning either as a derived transitive form, “he saw it,” or as a participial noun “his seeing it” (both interpretations are debated and have merit, although opting for one over the other doesn’t change the meaning of the passage). The subject of this statement comes next in the personal name Yax K’oj Ahk (YAX-k’o-jo a-AHK) (Stuart 2011b).

Thus Stuart also believes that *Yax K’oj Ahk* (not just *Ahk*) is not a cosmic turtle but the personal name of a historical ruler from the court of *Chak K’uh* (possibly referencing the site of Chancala, Chiapas), who “witnessed” the 4 *Ajaw* 8 *Kumk’u* day in historical time and not as an era date (Stuart 2011b).

However, questions remain. First, this is the only instance of the *Yax K’oj* nomen and it does not occur on other titles for this particular ruler (as the Guy Dixon fragment and the Dumbarton Oaks Relief Panel 4 reveal). Secondly, similar to other era day inscriptions, the scribe ties the Calendar Round to a major Period Ending celebration, in this case the possible start of the 9th *bak’tun*. Only more Chancala inscriptions and a deeper understanding of the site’s history will resolve these issues. Given so many unknown factors, Kerr Panel 6593 can not be designated holding an era day text.

III.28 Dresden Codex: An Introduction

The *Dresden Codex* records a multitude of era dates. Most of these are not accompanied by a Long Count and perhaps for this reason recent scholars have not included them in past surveys of era inscriptions. However, Förstemann (1904:403; 1906) and Thompson (1972) did recognize in their studies this proliferation of era dates within the codex. To verify that the dates do reference era day, one must follow how the dates are being employed within a particular table or almanac as an anchor date (e.g. as a base date for the eclipse tables in Column 1, page 51) or use the accompanying Distance Numbers to calculate that the Calendar Round position is in fact the zero date (e.g. Column 3, page 62). Many of the era dates are connected to Ring Number calculations, or Distance Numbers that are meant to be subtracted from the base date. Sometimes the scribe will start a page with the era date and not reference it via a Distance Number but rather describe the actions of era day gods within and even provide an illustration of what took place (e.g. Dresden page 60a). The descriptions of era day events are usually quite terse. They were meant to serve as a reference point to calculate forward or backward to a more relevant date. Taken as a whole, a sketch emerges of what the Dresden scribe thought about gods and events surrounding the start of the era. The analysis that follows reviews the pages of the codex in numerical order.

As mentioned, the majority of era dates express are connected to so-called Ring Numbers (Willson 1924:24-25; Thompson 1972:21-22). These numbers are a Distance Number whose lowest value (the *k'in*) is encircled with a red loop that probably represents a red, knotted cloth. These Ring Numbers signal to the reader that the sum of the Distance Number that they are connected to, is to be subtracted from the base date 13.0.0.0.0 4 *Ajaw* 8 *Kumk'u*. The subtracted value arrives to a new Calendar Round date that serves as a new starting point for various almanac tabulations. Often, the era date 4 *Ajaw* 8 *Kumk'u* is located directly below the Ring Number as a reminder that it does serve as the anchor. However, there are cases when the era date is not present (*Dresden* pages 71a, 72a, 73a) and in such instances, it is assumed that the era date is the intended anchor date from which the accompanying Distance Number is to be subtracted.

The obvious astronomical nature of the *Dresden Codex* pages in which era dates appear presents a thorny problem when trying to interpret the mythology. One must always consider the possibility that scribes were incorporating contemporary or ancient astronomical events into mythological stories and vice versa (p.c. Michael Grofe 2012). If true, then those mythic references targeting direct astronomical phenomena (e.g. the

helical rise of Venus or a solar and lunar eclipse) might form a unique data set that are not meant to be shared by any other mythic narrative expressed outside the *Dresden Codex*. All this adds an extra layer of complexity to our investigation when trying to discern the core mythos shared between scribal schools of thought.

Dresden Codex

Date of Composition: Post Classic

Era Texts: multiple pages host era day texts. These pages are:

Page 24, Column C, C1-C12

Page 31, Section a, Column A, B and C, (A10-11), (B10-11), (C12)

Page 43, Section b, Column C, (C11)

Page 45, Section a, Column A (A6)

Page 51, Section a, Column A, (A2-A3)

Page 52, Section a, Column D-E, (E1-E2)

Page 52, Section a, Column F, (F1-F2)

Page 58, Section a, Column E, (E17-E18)

Page 60, Section a, Columns A-D, (A1-D3)

Page 61, Column A and B, (A1-B17)

Page 62, Column E and F, (E18-E19), (F17-18)

Page 63, Column A, B and C, (A17-A18), (B17-18), (C23-C24)

Page 69, Column C and D, (C1-D15)

Page 70, Column A, B, C, D, (A13-A14), (A23-A24), (B13-B14), (B23-B24), (C1-C5), (D1-D5).

Location: circa Yucatan, Mexico and possibly originating from the Island of Cozumel (Kremer 1995:8-15).

Archive: Saxon State Library, Dresden Germany.

Photographs: Förstemann (1880); Dresden (1998); on-line version at FAMSI:

www.famsi.org/mayawriting/codicies/dresden.html as well as Vail and Hernández

(2011); also for a high resolution version of the codex see:

<http://digital.slubdresden.de/sammlungen/werkansicht/28074827/0/>.

Drawings: Kingsborough (1831-1848); Villacorta et al. (1930); drawings of individual glyphs see Macri et al. (2009).

References: Förstemann (1880; 1887; 1906:110-120); Willson 1924; Beyer (1943) Thompson (1972); Lounsbury 1983; Bricker and Bricker (1986, 1988); Grofe 2007; Schele and Grube (1997); Vail and Hernández (2011).

III.29 Dresden Codex page 24, Column C (C1-C12) — Figure III.96

Page 24, Column C (C1-C12)

C1-?

C2-8 KUMK'U

C3-yo-OK-ki

C4-“God L”

C5-CHAK EK'

C6-10 CHAN-na

C7-CHAK EK'

C8-T172-K'AWIIL

C9-T172-CHAK-“BOLAY”

C10-T172-“GOD E”

C11-T172-“GOD TITLE T226”

C12-T172-“GOD TITLE T1055”

Transliteration

? 8 KUMK'U yo-OK-ki “God L” CHAK EK' 10 CHAN-na CHAK EK' T172-K'AWIIL T172-CHAK-“BOLAY” T172-“GOD E” T172-“GOD TITLE T226” T172-“GOD TITLE T1055”

Transcription

[kan ajaw] waxak kumk'u [wa'laj] yok “God L” chak ek' lajun chan chak ek' T172-k'awiil T172-chak-“bolay” T172-“God E” T172-“god title T226” T172-“god title T1055”

Translation

(four ajaw) eight kumk'u, (stopped) (the) foot/step (of) “god L” (and the) great star ten-sky (god), (the) great star “wounded” k'awiil, “wounded” red “bolay”, “wounded” “maize god”, “wounded” “T226 god”, “wounded” “T1055 god”

Commentary

The era day passage on page 24 Column C (Figure III.96) can be designated so by way of calendar notation (Förstemann 1906:117; Schele and Grube 1997:143). Block C2

displays the latter part of the Calendar Round with *haab* day name of 8 *Kumk'u*. The [4 *Ajaw*] *Tzolk'in* part of the day (C1) is reconstructed. The era date serves as the base date for the Venus Table calculations, especially for the two initial Long Counts stated in Column B (B13-B17 and C13-C17). Also, the mention of the base date at (C1-C2) is a continuation of the same date given at the bottom of Column A (A20-A21). Therefore, one is assured that the era base is intended.

Like on Kerr vase K7750 and K2795, God L takes center stage at the dawn of the new era as he is listed as the first of the gods whose “foot” or “step” is calibrated within the celestial sphere. The scribe notes that on this day the foot or step of the god “stops.” The foot of the god is a clear marker for his step and stride. This stopping point serves as new starting point for the Venus Almanac and subsequent Long Counts that follow ⁶⁷. Perhaps due to lack of space, the scribe did not add the verb *wa'laj* as is commonly done on similar era day statements (as on page 70 of the codex, Columns C and D, blocks C3 and D3). After the mention of God L's name and of the “Venus” god *Chak Ek' Lajun Chan*, five more god names are given. Schele and Grube (1997:143) relate the last five gods listed to the speared or wounded gods pictured at the bottom pages of Venus Almanac: *K'awiil* (C8) on page 46 Section c; the *Chak*-“Bolay” God (C9) with the speared animal on page 47, Section c; the Maize God (C10) on page 48, Section c; the T226 God (C11) with the frog-like creature on page 49, Section c, and the T1055 God at (C12) with the fallen god at the bottom of page 50, Section c (Figure III.97). Since all five of these latter gods are depicted as fallen and speared with darts Schele and Grube (1997:143) proposed that the collocation preceding each of these god names (the T172 sign) is be translated as “wounded” although, they offer no direct phonetic evidence to back up their interpretation.

⁶⁷ The footprint a god leaves behind along a celestial path is an image found throughout the Dresden Codex. Very often the scribe illustrates *Chaak* in the act of walking. For instance, on page 65b of the Dresden, *Chaak* walks along a road with a staff in the right hand (Bricker 2002:6). His footprints on the register below indicate the forward direction of travel. The glyphic caption above his head reinforces this observation as it reads, “*an ti beh chaak*,” “exists in the road *Chaak*” (Schele and Grube 1997:192). On Dresden page 35, *Chaak* stops to rest a while on a location comprised of two interlocked “u-shaped” pathways. The location is a crossroads of sorts with opposite footprints radiating outward from a center point. These celestial looped pathways are found in the registers of sky bands such as in Codex Madrid pages 12, 15, 21, 35 and 36 (figure 8). Also on Madrid Codex page eleven, God C sits on a sky band seat below a path marked by footprints. From these examples, it is quite clear that *Chaak* along with other gods were celestial vagabonds and that their footprint served as clear marker for their step and stride.

III.30 Dresden Codex Page 31, Section a, Column A (A10-A11), Column B (B10-B11) and Column C (C12) — Figure III.98

Commentary

In the register located at the top of page 31 commences a new almanac displaying three era base dates (Figure III.98). This new almanac seemingly concerns itself with a count of 364 days that is divided into groups of 91 days or a little less than a quarter of the solar year (Förstemann 1906:223). It is not surprising that the era date occurs here since it is again being employed as the main base date from which calculations are reckoned. The three era dates are located at the bottom of page 31, Section a, in Columns A, B, and C.

Above the era date in Column A is a Ring Number of 6.1 or 121 days counting backward to the date [12.19.19.11.19 13 *Kawak*] 7 *Kej* (the *haab* portion of the date is evident at the top of the column in block A2). A Long Count of 8.16.14.15.4 is then counted forward arriving at the date 13 *Ak'bal* 16 *Pohp*. The 13 [*Kawak*] 7 *Kej* base date and stated Long Count of 8.16.14.15.4 is the very same calendar calculation found on page 62 Column F that shares the same era day base date. It is evident the scribe wants to link the almanac on page 31 to calculations of the same Long Count from page 62 of the Serpent Number pages.

At the bottom of Column B is the era base date and directly above it is a Ring Number counting backward 17 days reaching a new base date of [13 *Ak'bal*] 11 *K'ayab* (the *haab* portion of the date name of which is located at block B2). A Distance Number of 8.16.3.13.0 is then counted forward from [13 *Ak'bal*] 11 *K'ayab* to arrive at the new base of [8.16.03.12.03] 13 *Ak'bal* [11 *Yaxk'in*] noted at block B8. These same set of calculations are found on page 63 Column B in glyph blocks B8-B18.

Page 31 Column C hosts another era date written as just 4 *Ajaw* at block C12. With a slight correction of the Ring Number, its calculations parallel exactly the red Long Count calculations found on Page 63 Column C. At the bottom of Page 31, Column C is the base date of 4 *Ajaw* 8 *Kumk'u* with an adjusted Ring Number directly above of 7.2.14.[19]. The Ring Number indicates that one counts backward from the era date; in this case by a distance of 7.2.14.19 days, thereby arriving at a previous era Long Count of [12.12.17.3.1 13 *Imix* 9 *Wo*], a day which would have been written at the very top of Column C but now is eroded. Finishing the calculations in Column C, a black Long Count of 10.13.13.3.2 is counted forward from the base date [12.12.17.3.1 13 *Imix* 9 *Wo*], arriving at the day [10.6.10.6.3] 13 *Ak'bal* [1 *K'ank'in*] (written as 13 *Ak'bal* at block

C18). Although the above calculations are probably correct, because of the corrections employed, Page 31 Column C can not be considered a definite era day passage.

What the calculations in Columns A and B reaffirm is that era day serves as the base date by which a scribe is “bench marking” his calculations at the start of another almanac. Therefore these 4 *Ajaw* base dates deserve the recognition as era dates.

III.31 Dresden Codex Page 43, Section b, Column C (C11) — Figure III.99

Commentary

Page 43 Section b (Figure III.99) and Page 44 Section b, comprise an almanac relating to a 780-day and a 78-day cycle. Robert Willson (1924:22-25) was the first to point out that 780 days approximates the mean synodic period of Mars and that the 78-day period that is close to the average Mars retrograde period of 75 days. One almanac that calculates the synodic period of the red planet and a companion almanac that represents the retrograde period of Mars (Kelley 1983:178; Bricker and Bricker 1986; Milbrath 1999:219).

An era date is represented at the start of the almanac by the date 4 *Ajaw* (Thompson 1972:107) that is located at the very bottom of page 43, Section b, Column C (C11). Sitting directly above the era date is a Ring Number of 17.12 or 352 days that counts backward from the era base to the date [12.19.19.0.8] 3 *Lamat* [1 *Wayeb*] and represented by the day name 3 *Lamat* located at C1. The 3 *Lamat* day name is directly followed at C2 with a “Square-Nosed-Beastie” sign (a head with a fret-nosed snout) thought to be representative of Mars itself (Milbrath 1999:221). A Distance Number of 9.19.8.15.0 (C3-C7) is then counted forward from the 3 *Lamat* base, arriving at 9.19.17.15.8 3 *Lamat* 6 *Zotz* (March 24 818 AD) and it is this date that serves as the primary base for the calculations that follow (Thompson 1972:107). These calculations show that the 4 *Ajaw* date (C11) is the era base and it serves as the primary reference to which almanac begins. This almanac reinforces the idea that era day is a point of departure that gods (represented as planetary cycles) are tracked and referenced.

III.32 Dresden Codex Page 45, Section a, Column A (A6) — Figure III.100

Commentary

Another almanac of unknown meaning begins at the top of page 45, Section a (Figure III.100). The 4 *Ajaw* date in Column A, (A6) representing the era base is at the bottom of Column A. The month day name of 8 *Kumk'u* (A2) stands at the very start of Column A and it is likely that it too is representative of the era base. Following the 8 *Kumk'u* at block A2 is the expression **K'UH OK-ki** standing for “holy stride/foot” and most likely represents the referencing of a god’s position (via its foot) in reference to the era base.

Directly above the 4 *Ajaw* date at A4-A5 is a Ring Number of 1.10 or 30 days that counts backward to the date [12.19.19.16.10 13 *Ok* 18 *Pax*]. Column B carries a Distance Number of 8.17.11.03.[0] that is most likely counted forward from the new 13 *Ok* base leading to the date [8.17.11.01.10] 13 *Ok* [3 *Mol*], and is represented by the 13 *Ok* date at the bottom of Column B. It is equally plausible that the Distance Number of 8.17.11.3.[0] could have been counted backward rather than forward from the base date [12.19.19.16.10 13 *Ok* 18 *Pax*]. All these calculations reaffirm again that the era base is intended as a base date at the start of this almanac ⁶⁸.

III.33 Dresden Codex Page 51, Section a, Column A (A2-A3) — Figure III.101

Commentary

The Lunar Tables and pages in the *Dresden Codex* display three era dates, on pages 51 and 52 (Förstemann 1906:119; Thompson 1972:71). All three references serve as the base day from which several Long Counts commence, verifying that the base date is indeed era day. The dates reached by these Long Counts serve as initial points from which expanded almanacs, consisting of multiples of 260 days are reckoned (Förstemann 1906:119; Thompson 1972:71).

The first era date with a clear Calendar Round of 4 *Ajaw* 8 *Kumk'u* is on page 51, Section a (Figure III.101) located at the very start of the lunar tables in Column A (blocks

⁶⁸ What follows on page 45, section a, (in Columns C,D, and F) are a series of huge Distance Numbers whose higher periods have been lopped off due to a page tear. Column C might host a Distance Number of [11.] 7.0.4.0.16.0.15.2.0. (5,230,312,709,440 days) This missing part of the page most unfortunate since these sums of days could be counting into the distant past (or future) comprising some rare deep time calculations.

A2 and A3). Directly following the Calendar Round are three more glyphic blocks reading **12 LAMAT 8 K'IN ti-HA'** for “12 *Lamat* 8 days (in the) water.” The **ti-HA'** expression occurs here again in conjunction with the end of the 13th *bak'tun* (Thompson 1962:96) as it does on pages 61, 69, 70. The Brickers (1988:13-14) read the **ti-HA'** collocation as *tab'* for “addition” while Barbara MacLeod (p.c. 2011) translates it as *ti ha'* for “into the water” in reference to the addition of *k'ins* into a Long Count (see the discussion in Section III.36). Mathematically speaking, it is clear that a count of 8 days leads forward to the day 12 *Lamat* 16 *Kumk'u* and that this new base date serves as a chief anchor from which to calculate the lunar almanac.

III.34 Dresden Codex Page 52, Section a, Column E (E1-E2) and Column F (F1-F2)

— Figure III.102

Page 52, Section a, Column D and E (D1-E2)

D1-?

D2-8 K'IN-ni

D3-1 WINIK 5 ti-HAAB

D4-2 ti-HA'

D5-13

D6-13

D7-13

D8-13

D9-13

D10-13

D11-13

D12-13

D13-13

D14-13

D15-13

D16-13

D17-13

E1-? AJAW

E2-8 KUMK'U

Transliteration Page 52, Section a, Column D and E (D1-E2)

? 8 K'IN-ni 1 WINIK 5 ti-HAAB 2 ti-HA' 13.13.13.13.13.13.13.13.13.13.13

? AJAW 8 KUMK'U . . .

Transcription

? *waxak k'in jun winik jo' ti tun ka ti ha' 13.13.13.13.13.13.13.13.13.13.13 [kan]*
ajaw waxak kumk'u . . .

Translation

? eight days, one winik, 5 haab, two (twice?) into water

13.13.13.13.13.13.13.13.13.13.13.(0.0.0.0)? (four) ajaw eight kumk'u . . .

Commentary

Another two sets of era dates are written side by side on page 52, Section a (Figure III.102). These dates are located in the final two columns of the page (E1-E2 and F1-F2). A series of very straightforward Long Counts are then calculated forward from each era base to reach designated dates. The black and red Long Counts in Column E contain errors and do not reach their intended dates of 3 *Etz'nab* and 7 *Lamat* (located at the bottom of Column E). On the other hand, the Long Counts in Column F do reach their intended target dates of 12 *Lamat* and 1 *Ak'bal* (located at the bottom of Column F). Other than mathematical calculations, no additional information is given as to the events occurring on era day.

Column D may contain additional calendar notation relating to the era base dates that directly follows at the top of Column E (p.c. David Stuart 2006). Column D is transcribed from top to bottom (D1-D17) as follows:

? *waxak k'in jun winik jo' ti tun ka ti ha' 13.13.13.13.13.13.13.13.13.13.13*
kan ajaw waxak kumk'u . . .

The first part of the passage records a Distance Number of 5.1.8 days, that when counted from era base, leads forward to another 12 *Lamat* anchor date that is similar to the 12 *Lamat* date at the very first column of the lunar tables on page 51. Therefore the scribe seems to be indicating again the 12 *Lamat* day is serving as an important hub to mark calculations. A look at Columns A, B, and C on 52a verifies that 12 *Lamat* is featured as an intended target since the date is listed as the first starting point for a lunar count starting at A10, B10, C10. The most striking feature of Column D is a Long Count listing 13 periods (D5-D17), each with a value of 13. It is a count reminiscent of the “Grand Long Count” on Coba Stela 1, 5 and 28. If a “Grand Long Count” connected to the era date is intended, then the coefficients represent those above the *k'atun* period. These

coefficients of 13 and mark the Long Count as:

13.13.13.13.13.13.13.13.13.13.13.13.13.13.0.0.0.0 4 *Ajaw* 8 *Kumk'u*. Therefore, this column of 13 numbers could be acting as the coefficients of a “Grand Long Count” and connects to the era base day directly following at the top of Column E (E1-E2). Such a Long Count seems wildly out of place so another explanation must be sought out that is more in keeping with the Lunar Table calculations and conventions.

Alternatively, the Brickers (1988:13-14) and Grofe (2007:155-160) provide an different explanation for the number thirteen written thirteen times in Column D. The Brickers see these thirteen numbers as thirteen distinct Distance Numbers (with a value of 13 days each) used in calculating and adjusting various lunar intervals. Grofe argues convincingly that the thirteen numbers are related to a 3,640 day interval that aided in tracking the lunar and solar nodes through the tropical year for the purpose of predicting eclipses:

Thus, while the sidereal position of the opposite node recesses from the tropical year by about 13 days every 3,640-day interval, the recession in 13 multiples of 3,640 days is such that adding 169 days (13 x 13) returned the sun to the same node near the same position in the tropical year (Grofe (2007:157).

Grofe’s explanation follows closely the rational and overall purpose of the lunar tables and serves as a more cogent argument of the anomalous occurrence of all thirteen numbers.

III.35 Dresden Codex, Page 58 Column E (E17-E18) — Figure III.103

Commentary

Columns E and F on Page 58 (Figure III.103) begin another almanac that continues onto page 59. As Förstemann (1906:215) concluded early on, the almanac seems to concern itself with multiple counts of 780 days— a possible Mars cycle. There appears a very prominent era date at the bottom of Column E. The Calendar Round is “color-coded” similar to other era base dates on pages, 60, 61, and 69 with the background of the 4 *Ajaw tzolk'in* date highlighted in blue paint and the 8 *Kumk'u* portion of the *haab* day highlighted in a light brown/yellow tint. The era base is connected to a Ring Number that counts backward into the past to a pre-era event *wa'laj* (E2) event involving a fire ritual and several gods including *K'awiil* (E3-E12). The subtracted count is by a Distance Number of 1.7.11 (511 days) to reach the day 13 *Muluk* [2 *Zak*] with the

tzolk'in portion of the day name listed at the very top of Column E (E1). A second inscrutable red Distance Number with the coefficient 12 exists that has no obvious connection to the 13 *Muluk* date. Column E stresses the 13 *Muluk* date as a new base from which to reckon from. This no doubt that the date 13 *Muluk* is in some way associated with the thirty nine calculations listed directly following on page 59, many of which aim to use the day 13 *Muluk* as a base date.

Interestingly, it seems that Columns E and F are separated by thick red vertical borders which seemingly segregate the two lines of text in the adjoining columns so that they are each read vertically, and not read in the left-to-right standard reading order. If this is the case, then Column F might be linked to the era base date at the bottom of Column E. The date [13 *Muluk* 2 *Mol*] is rendered by adding to a 13 *Muluk* [2 *Sak*] base date (F19), the Distance Number of 9.18.2.2.0 from Column F (blocks F8-F12) ⁶⁹. Also a review of page 58, block F1 in the Kingsborough (1831-1848) edition of the codex shows a single dot coefficient that may relate to the expected *haab* coefficient of 2 (for a reconstructed date of [13 *Muluk* 2 *Mol*] at block F1-F2). Therefore, it seems that Column F holds no era date and has no relationship to the era base. In this instance, the base date at blocks E17-E18 serves as an era date. However, its use is largely referential and it is used only as an anchor date for counts into the past.

III.36 Dresden Codex Page 60, Section a, Columns A-D (A1-D3) — Figure III.104

A1-?	B1-8 KUMK'U
A2-?-ja	B2-“God N”
A3-u-KAB-ji SAK?	B3-tu-ba CHAAK-ki
C1-BOLON-OK-TE'	D1-?
C2-YAH? WINIK-ki	D2-XUL?-K'IN
C3-TOK'-PAKAL	D3-“OPOSSUM?/BAKAB”

Transliteration Columns A-D (A1-D3)

? 8 KUMK'U ?-ja “God N” u-KAB-ji SAK? tu-ba CHAAK-ki BOLON-OK-TE' ?
YAH? WINIK-ki XUL?-K'IN TOK'-PAKAL “OPOSSUM?/BAKAB?”

⁶⁹ Subtracting 9.18.2.2.0 from 13 *Muluk* 2 *Sak* one arrives at a Calendar Round of 13 *Muluk* 2 *K'ank'in*.

Transcription

[kan ajaw] waxak kumk'u ?-ja ja "God N" u kab[a]j ? tuba[h] chaak bolon [y]okte'
yah? winik xul?-k'in tok' pakal ["opossum?-bakab"]

Translation

(on four ajaw) eight kumk'u ? "God N", tended by ? the first chaak bolon yokte',
wounded? (were the) twenty days, end (of) days (by his) flint (and) shield "opossum-
bakab"

Commentary

Page 60 has always presented a bit of enigma as to what it relates to and what the figures on its pages represent (Figure III.104). First, let us consider the nature of the almanac. In his analysis of these pages Thompson noted that page 60 *could be* part of a series of missing pages:

There are grounds for thinking that Codex Dresden once continued beyond page 60, the last page on the obverse side, a possibility to which Zimmermann (1964:235) has subscribed. I am confident that page 60 is the start of a round of katun prophecies (p. 78). Supposing a page for each katun, there could have been 12 or more leaves following page 60, or, with a series continuing on the reverse of the presumed pages, only six additional leaves, leaving the reverse of page 60 as it now is. There may have been two katuns to a page, which would have further reduced the supposed extra leaves (Thompson 1972:19-20).

What made Thompson think that the page started the *k'atun* prophecies is not only the existence of an era date in Section a, (discussed in the paragraphs to follow) but the lower Section b of page 60 holds the date 11 *Ajaw*. As Landa's manuscript (see Section XXXIX of Landa's work; Gates 1978) and the Chilam Balams make clear, *k'atun* 11 *Ajaw* was the first day in the Count of *K'atuns*⁷⁰. Therefore, Section a and Section b on page 60 do not relate to one another directly rather the first deals with a 4 *Ajaw* 8 *Kumk'u* era event while the lower register deals with the start of the *k'atun* cycle on 11 *Ajaw*.

Page 60, Section a sports what Thompson believed was an era day recording. Thompson (1972:19-20) and Förstemann (1904:222) noted that an era day was recorded

⁷⁰ The 11 *Ajaw* date corresponds to the Short Date count of the *k'atuns*. As an example, take the Long Count 0.15.0.0.0 13 *Ajaw* 8 *Pax*. This is the last day of the *k'atun* 13 *Ajaw*-which is also the name of the *k'atun*. The next day has a Long Count of 0.15.0.0.1 and the day is 1 *Imix* 9 *Pax* and this will be the first day of *K'atun* 11 *Ajaw*. Erik Boot reminded me recently (p.c. 2009) of these calendar facts and noted that in the cycle of *k'atuns* the first day of every *K'atun* 11 *Ajaw* will be always 1 *Imix* as Diego de Landa wrote (see Section XXXIX of Landa's work; Gates 1978), the first day of their calendar count was 1 *Imix*, and as the *Chilam Balam* make clear, *K'atun* 11 *Ajaw* was the first day of the Count of *K'atuns*.

at glyph blocks A1-B1. I accept their interpretation here. When reading the glyphs, one sees immediately that the *haab* portion of the era day (8 *Kumk'u*) is recorded at glyph block B1. Supporting the idea that this is an era day reference is the fact that the first six glyph blocks are also painted with a blue background. The blue seems to part of a color-coding scheme used in this codex. For reasons unknown, the Dresden scribe often highlighted era day and pre-era passages in blue color (see pages 61, 62 and 69 for more blue highlights). The top of page 60 references the era date (A1-B1) and depicts a God N *bakab* (standing at the viewer's left) within his turtle shell carapace being confronted by two figures of the *Bolon Yokte'* (standing at the viewer's right) brandishing raised spear-throwers. The names of these gods are referenced in the texts directly above. God N is named in glyph block B2 with the variant name *Itz Mam K'an Ahk* while the *Bolon Yokte'* title is recorded clearly at block C1⁷¹. Unfortunately the glyph block that holds the verb (A2) is eroded and so the stated action can not be translated. Verification that *Bolon Yokte'* is indeed attacking God N comes from looking at the same figures on page 60 as recorded in the Kingsborough edition of the *Dresden Codex* that preserved many details now lost (Kingsborough 1831-1848). Page 60 of the Kingsborough edition shows blood gushing from the forehead of God N (Figure III.105a). Faint traces of these blood markings are still visible on the forehead and cheek of God N in later photographs in the Förstemann edition of the book. The attack stance of the *Bolon Yokte'* along with the forehead injuries of God N are good evidence of a clash between these gods. The question then arises: what force of nature does the *Bolon Yokte'* represent, if any? Brandishing such fearsome weapons as the spear thrower (and in other cases a rope, a spear and a shield) he is shown to possess a war-like destructive force (Eberl and Prager 2005), and with it disorder. What happens when *Bolon Yokte'* attacks the God N *Bakab* and what would be the result? To answer this, one needs to understand the role God N has to the creation of both space and calendar cycles.

In the Classic and Post Classic Period, one of God N's duties within the cosmic order was similar that of Atlas from Greek mythology who supported the heavens. God N is consistently depicted in the iconography as one who supports the sky above the earth (Thompson 1970:276). It is clear that the God N seen in the Classic period is related to the *Bakabs* in the Post Classic. His Atlas-like abilities are attested to in Diego de Landa's description of this god:

⁷¹ A reading of the God N title has been provided by Erik Boot (p.c. Erik Boot 2010).

Among the multitude of gods worshipped by these people they adored four, each of whom was called Bacab. These, they said, were four brothers whom God, when he created the world, placed at its four quarters to hold up the sky, so that it should not fall. They also state that these Bacabs were saved when the world was destroyed by a deluge. Other names are <also> given to each of these, and with them they designate the world quarter where God set them to hold up the sky (translation from Thompson 1970:276).

The God N stone figures at Mayapan also show the role that God N plays in the creation of the *k'atun* count. There are over twenty stone turtles (Figure III.105b) and God N and turtle figurines found in Mayapan houses (Proskouriakoff et al. 1962:331-333). As Karl Taube (1988) pointed out, a few of the turtles have *Ajaw* glyphs carved on their outer rims (Figure III.106a-b). Taube makes the connection between these turtles and the pictured *k'atun* “wheels” (counting off a period of thirteen *k'atun* periods) that pop up in colonial literature. Landa reported the Maya of Yucatan utilized these *k'atun* wheels in their computations (Tozzer 1941:168 after Pharo 2006:59). A close inspection of the stone turtles, show that some are anthropomorphic representations of God N (Pharo 2006:59) and at least one of these God N figurines has *Ajaw* glyphs (another *k'atun* count) carved around the outer rim of its carapace (Figure III.106a). Taking the Mayapan data into account and applying it to God N’s role as a sky-bearer, we understand that the record of *k'atuns* was organized on the very carapace of God N. With God N as the sky-bearer, the result of an attack by the *Bolon Yokte'* is nothing short of disastrous for space and time. Logic dictates that, with the threatening of the God N sky-bearer, the count of the *k'atuns* is adversely affected since time and space are nested in the same god. Perhaps this is why it is mentioned on page 60, block C2 that the *winik*, the count of twenty days is “wounded/damaged.”

III.37 Dresden Codex Page 61, Column A and B (A1-B17) — Figure III.107

A1-?	B1-?-ma
A2-?	B2-K'UH
A3- PAT-ja	B3-“PIKTUN”
A4- T24?-18	B4-PIK
A5-“BAKAB”	B5-“BAKAB”
A6- WINIKHAAB	B6-8 HAAB
A7-16	B7-yo-K'IN-ni
A8- PAT-ja	B8- aj-WINIK-ki
A9-19	B9-aj-mi-K'IN-ni
A10-4 AJAW	B10-8 KUMK'U
A11- ja?-na-ki	B11-u-LOK'
A12- PIK	B12-OCH-ti-HA'
A13-1-?-“PIKTUN”	B13- PAT-ja
A14-15 WINIKHAAB	B14-9 HAAB
A15-1-?-WINIK-ki	B15-3 K'IN-ni
A16-19-OCH HA'	B16-u-aj-?
A17- OCH-pa?-WITZ?	B17-ta-HA'
A18-? KAN	B18-12 K'AYAB

Transliteration Page 61, Column A and B (A1-B18)

. . . ? K'UH PAT-ja “PIKTUN” T24?-18 PIK “BAKAB” “BAKAB” WINIKHAAB
8 HAAB 16 yo-K'IN-ni PAT-ja aj-WINIK-ki 19 aj-mi-K'IN-ni 4 AJAW 8 KUMK'U
ja?-na-ki u-LOK' PIK OCH-ti-HA' 1-?-“PIKTUN” PAT-ja 15 WINIKHAAB 9
HAAB 1-?-WINIK-ki 3 K'IN-ni 19-OCH HA' u-aj-? OCH-pa?-WITZ? ta-HA' ?
KAN 12 K'AYAB . . .

Transcription

. . . [ox lut?] k'uh pa[h]t[a]j [jun?] “piktun” waxaklajun pik “bakab” “bakab ” [jun?]
winikhaab waxak haab waklajun yok'in pa[h]t[a]j aj winik bolonlajun aj mih k'in kan
ajaw waxak kumk'u janak? u lok' pik och ti ha' jun piktun pa[h]t[a]j jo'lajun winikhaab
bolon haab jun ? winik ox k'in bolonlajun och ha' u aj [winik] och pa'?'-witz [bolon] k'an
lajka' k'ayab . . .

Translation

. . . (the “triad”) god(s), were formed (one) “piktun”, eighteen pik, “bakab” (and) “bakab”, (one) k’atun, eight tun, sixteen yok’in, were made, he (of) twenty, nineteen (and) zero days, (to) four ajaw eight kumk’u, unencumbered? it emerges (the) pik (cycle), enters into (the) water one “piktun”, were formed fifteen winikhaab, nine haab, one winik (and) three k’in, nineteen-enter-water-(place) its aj-(winik), enters into (the) split? mountain at (the) water, (on) (nine) k’an twelve k’ayab . . .

Commentary

The Serpent Number pages are located on pages 61, 62 and 69 and contain four era day passages. Pages 61 and 69 (Figure III.108) particularly host inscriptions that detail events on or shortly before era day (Thompson 1972; Bricker and Bricker 1988; Schele and Grobe 1997:188-189, Grofe 2007, Callaway 2009) ⁷². Thompson (1972:81) noted that the two parallel passages on pages 61 and 69 contain numbers with periods that seem to count to and from creation day 4 Ajaw 8 Kumk’u, which is located near the center of each passage (Figure III.108). He postulated that those glyphs preceding the era date occur before creation while those afterward take place on or after era day. To reinforce this logic on page 69, the scribe seemingly segregates the pre-era counts and actions from the creation day actions by highlighting the pre-era passages with blue paint.

The passage recounted on Page 61 Columns A and B (Figure III.107) tells of the making period cycles with the assistance of gods prior to the era date ⁷³. The passage is very difficult to interpret because of its multi-layered voices. This is no solitary count of days. The count is a poetic tapestry of interwoven texts with multiple threads that wrap around one another forming a single strand—the passage itself. One thread is a numerical strand consisting of the k’in, winik, haab, pik and piktun period counts; another strand tells of those gods who are “custodians of time and commensurated cycles” (p.c. Barbara

⁷² Surprisingly, very little has been written about the Serpent Number pages. The most recent in-depth treatment of the Serpent Number Pages can be found in Thompson (1972:70-71), Bricker and Bricker (1988) and Grofe (2007:56). The Brickers (1988:S7) were the first to consider that Column A and B held Distance Numbers. The passages befuddle the epigrapher with their strange numerical counts and obscure notation. What is known about their fundamental counts comes from the work of Hermann Beyer (1943:404) who showed in a brilliant deduction that the base date of 9 Kan 12 K’ayab (located on all three Serpent Number pages) occurred on a day lying more than 34,000 years before the base date of 13.0.0.0.0 4 Ajaw 8 Kumk’u. The 9 Kan 12 K’ayab date has an associated Long Count of [1.11.15] 3.16.14.11.4. and serves as a base date from which the Distance Numbers (along the serpent’s body) are counted (Beyer 1943). For example, in Column C and D on page 61, the 9 Kan 12 K’ayab base date is located at glyph blocks C4 and D4. The black and red Distance Numbers listed vertically along the curves of the serpent’s body (on column two, page 61) count forward from [1.11.15.] 3.16.14.11.4. 9 Kan 12 K’ayab date to (10.11.5.14.5) 3 Chikchan 13 Pax, a day located at the base of the serpent’s tail.

⁷³ see also the parallel events on page 69 Column II, C1-D10.

MacLeod 2008) and assist in renewing the various cycles present; the last strand contains mytho-poetic expressions describing the pre-era and era day events as cycles that emerge from and sink into the “watery” depths of primordial time. Mathematically speaking, it contains a series of sums or numerical counts (e.g. 20 days) that count to and from the era base date, which is located near the center of the passage (Thompson 1972:81; Bricker and Bricker 1988:S7-S8). The verb the scribe chooses to describe the action is *pat* (Grofe 2007:60,129) for “to make, mould, fashion” (blocks A3 and A8) which is known from other contexts as a verb frequently connected to the making of temples and houses (Stuart et al. 1998)⁷⁴. Here the verb refers to the creation of gods and time periods.

The title concerning a “triadic group” of gods appears at the top of the passage (A2-B2) and could refer to three of the gods present who assist with the counts (although the glyph block at A2 is eroded on page 61)⁷⁵. The “Triad God” title, can be reconstructed with the help of parallel events listed on page 69 Column II, C1-D10). As explained in Chapter IV, Section 8, the title is often used to introduce a triad of deities. Next it is said that 1? “*piktun*”⁷⁶ and 18 *pik* are made (A3-B4) in conjunction with two “*bakab*” gods (A5-B5), 1 *winikhaab*, 8 *haab*, and the 16 *yok’in* god (A6-B7). If the two *bakab* gods present are aspects of God N, then what is being implied is the formation of the *winikhaab* by the custodians of God N. As for the numerical count of days being expressed, Bricker and Bricker (1988:S7-S8) see 2,594,896 days counted from the era date while Grofe (2007:60-65) thinks such periods reflect a Distance Number of 5,482,135 days that is counted back from era day⁷⁷. What is important to note however, is that custodial gods and time periods are being formulated side-by-side with the *bakabs* and the 16 *yok’in* who are assisting the organization of the count. Here we see clearly, that Maya gods are not static deities but rather they are dynamic participants who are “engaged in cyclic processes in which time and space generated their diverse personifications and traits” (López Austin 1993:149).

The focus is now shifted to the last four glyph blocks (A8-B9) prior to the era date 4 *Ajaw* 8 *Kumk’u* (Figure III.109). The verb *pa[h]taj* “got formed” or “made” (Grofe 2007:60,129) is stated again and the passage (A8) speaks of the making of another

⁷⁴ The *Motul Dictionary* also list the verb *pat* as *inventar* and *fingir* (after Brotherston 1992:290).

⁷⁵ The “Triad” God is a misnomer in that this title frequently appears when introducing a set of three deities like those of the Palenque Patron gods GI, GII, and GIII (Stuart 2005b:160). So in all likelihood, it refers to a triadic group of deities and not a single god.

⁷⁶ Grofe (2007:59-63) first proposed the reading of “1” where the coefficient is absent on the “*piktun*” cycle.

⁷⁷ The Brickers (1988:87) were the first to consider that Page 61, Column A and B held Distance Numbers in what they referred to as “pictun notation.” For a discussion of the Brickers’ approach see Grofe (2007:59).

god/cycle prior to era day. The entity made is the *Aj Winik* or the twenty day period— the base number of Maya vigesimal counting; next is a count of twenty days from nineteen to zero (Callaway 2009:80-81). The creation of the number twenty followed by a numerical count of twenty days, corresponds to a similar pre-era story detailed in the *Book of Chilam Balam of Chumayel* from Colonial Yucatan; it is a story translator Ralph Roys titled “The Creation of the Winal” (Roys 1967:116-119). The story recounts the birth of the *Winal* and his measured steps as he circumnavigates the sky laying out a trajectory of days by which the sun and stars will be measured by (Brotherston 1992:288; Bricker 2002:1-20). Therefore, this part of the passage (A8-B9) serves as the antecedent to the *Chumayel* text.

After the statement of the era date, what follows next is another mystical-magical count rising out of the murky depths of primordial time. Numbers are said to “rise out” and “enter into” watery depths as well as into the dark recesses of mountains. Such poetic imagery describing arithmetic functions gives the impression that scribes envisioned addition and subtraction as acts of submersion and emergence, respectively (p.c. Barbara Macleod 2008); perhaps then as MacLeod states, a Long Count column of numbers was likened to a vertical pillar with its base submerged in water; to add a sum, numbers enter the bottom of the column and through the water while subtracted values rise out the top; as new additions are made into the bottom of the column, new totals bump up the upper layers sequentially; the expression **OCH TI HA’** “enter into the water” expresses “add at the bottom of the column” and **LOK’** (go out) can express “subtract” (p.c. Barbara MacLeod 2008) ⁷⁸.

Returning to the page 61 passage at block A11, after the era date it is stated that *janak? u lok’ pik* or that the *pik* cycle rises out “unencumbered” ⁷⁹. If the reading is correct, this part of the passage indicates that the Long Count was previously diminished to zero and a new count is now either accumulating or dissipating. Next (A14-A16) there “enters into the water” (one?) “*piktun*.” Then are made fifteen *winikhaab*, nine *haab*, 1 *winik* and 3 *k’ins* at a locale named **19 OCH HA’** for “19 enter water.” This place name, prefixed by 19, is depicted frequently in the *Dresden Codex* (page 33, section b; page 34 section b; page 35 section b) as the numeral 19 submerged in a watery pool wrapped by a serpent on which the rain god *Chaak* sits (like the waters of a *cenote*). The

⁷⁸ For an alternative view on the term **OCH** for addition and **PAT** for subtraction, see Grofe (2007:128-129). Grofe basically states that **OCH** is subtraction and **PAT** is addition.

⁷⁹ Barbara MacLeod (p.c. 2008) surmised that block page 61, block A11 reads *janak*— the root of the word here being *jan* meaning “without obstruction” (Barrera Vásquez 1993:177).

god *Aj Winik* is again possibly mentioned (B16) affirming that he is designating this count. The passage ends saying that the day 9 *K'an* 12 *K'ayab* “enters the mountain, at the water” (A17-B17) telling the reader that the base date for the Serpent Number Tables has been reckoned. In addition the preceding numerical count of days will be used to navigate through the Serpent Number almanac (Grofe 2007:60-67).

The prominent 4 *Ajaw* 8 *Kumk'u* date (A10-B10) cannot be directly connected via Distance Numbers to the era base 13.0.0.0.0. This is also true for the parallel passage found on page 69 (C10-D10). A look at the wider context of this passage reveals three immediate observations: (1) page 61 Column A and B serve as the initial text of the Serpent Number tables, an almanac for deep time calculations to which the era base date is inherently linked (Beyer 1943; Grofe 2007:60-65); (2) The same era base date occurs at the start of other *Dresden Codex* almanacs like at the start of the Venus Table (page 24), Lunar Eclipse Table (page 51) and the Mars Tables (page 43-44); (3) events directly proceeding the 4 *Ajaw* 8 *Kumk'u* date on page 61 describe the creation of the god of the number twenty (*Aj Winik*) as well as several custodial gods (e.g. *Bakabs* and the *16 Yok'in*) of time that are known from other sources to appear shortly before the era date or in conjunction with major period endings (Callaway 2009; 2011). So, there is strong evidence given by the overall context of this almanac and its inherent calculus that the era date is the intended anchor date for this passage.

III.38 Dresden Codex Page 62, Columns E and F (E18-E19, F17-18) — Figure III.110 **Commentary**

The base of page 62, Column E and F show two prominent era dates used simply as base dates to anchor Long Count calculations (Figure III.110). The dates also signal the reader that calculations are now returning back to an era base date, after several complex calculations involving huge Distance Numbers in the preceding Serpent Series numbers. The era base in Column E is connected directly above to a Ring Number of 1.4.16 or 456 days. Subtracting the Ring Number from the era base one arrives at a new base date of [3 *K'an* 17 *Mak*] (with the 3 *K'an* part of the day name no doubt reflecting the same 3 *K'an* date connected to the Distance Number 4.6.9.15.12.19 3 *K'an* 16 *Woh* located at the bottom of page 62 and Column D). Counting forward from a base date [3 *K'an* 17 *Mak*] the stated Distance Number of 8.16.15.16.1 to arrive at the date 3 *Chikchan* [18 *Sip*] (written as 13 *Sip*; blocks E13-E14).

In Column F a Ring Number of 6.1 days is counted backward from era base, arriving at [13 *Kawak 7 Kej*]. A Distance Number of 8.16.14.15.4 is then counted forward from the base [13 *Kawak 7 Kej*], arriving at the day 13 *Ak'bal* [16] (written as 15) *Pohp* (F13-F14). Due to these inconsistencies in calculations the era dates on Columns E and F can not be confirmed, therefore they are considered as possible era day candidates only. Yet, since all the majority of Ring Numbers in the Dresden Codex use the era day as a point of departure (p.c. Grofe 2012), it is a safe assumption that the 4 *Ajaw 8 Kumk'u* dates at the bottom of Column E and F are indeed the era base date.

III.39 Dresden Codex Page 63, Column A, B, and C (A17-A18, B17-B18, C23-C24) — Figure III.111

Commentary

Page 63 hosts three era dates located at the bottom of Column A, B, and C (Figure III.111). All three of these vertical texts are read in single columns. Seemingly, the scribe is using the era base as an anchor date into calculate another set of base dates (those of 3 *Chikchan* and 13 *Ak'bal*) that will correspond in matching *tzolk'in* day names to base dates expressed in the Serpent Series 61C and 62C (e.g. the Long Count of 4.6.14.13.15.1 3 *Chikchan* 18 *Xul* and the Long Count of 4.6.9.15.12.19 13 *Ak'bal* 1 *K'ank'in*).

At the bottom of Column A is the era base date and directly above it is a Ring Number counting backward 11.15. or 235 days reaching a new base date of 3 *Chikchan* [13 *Xul*]. A Distance Number of 8.11.8.7.0. is then counted forward from 3 *Chikchan* 13 *Xul* to arrive at the base 3 *Chikchan* [8 *K'ank'in*] written at A13-14.

At the bottom of Column B is the era base date and directly above it is a Ring Number counting backward 17 days reaching a new base date of 13 *Ak'bal* [11 *K'ayab*] (noted by the 13 *Ak'bal* at block B13) A Distance Number of 8.16.3.13.0 is then counted backward from 13 *Ak'bal* 11 *K'ayab* to arrive at the new base possessing another 13 *Ak'bal* [6 *Ch'en*] date written at B13-B14. The written *haab* day at B14 of 6 *Kumk'u* does not agree with the applied Distance Number of 8.16.3.13.0 in this case, and this could be due to a scribal error.

At the bottom of Column C is the creation base date of 4 *Ajaw 8 Kumk'u* with a Ring Number directly above of 7.2.14.19. The Ring Number indicates that one counts backward from the 4 *Ajaw 8 Kumk'u* base date by a distance of 7.2.14.19 days thereby arriving at a previous era Long Count and date of [12.12.17.3.1] 13 *Imix* 9 *Woh*, a

day which is written at the very top of column three (Beyer 1943:402). To finish out the calculations in Column C, a red Long Count of 10.13.13.3.2 is counted forward from the base date [12.12.17.03.01] 13 *Imix 9 Woh*, arriving at the day [10.6.10.6.3] 13 *Ak'bal* [1 *K'ank'in*]; (written as 13 *Ak'bal* at C18). A second black Long Count of 10.8.3.16.4 is counted forward from the base date [12.12.17.3.1] 13 *Imix 9 Woh* arriving at [10.1.1.1.5] 13 *Chikchan 3 Kumk'u*, a date which disagrees with the recorded day name of 3 *Chikchan* written at block C17. Despite these discrepancies with a few of the Distance Numbers, the calculations above verify that the era date in all three cases is serving as the primary anchor date to count to another set of base dates.

III.40 Dresden Codex Page 69 Column C and D (C1-D15) — Figure III.112

Page 69, Column C and D (C1-C18)

C1-?	D1-?
C2-3 lu-ti?	D2-K'UH
C3- PAT-ja	D3-“PIKTUN”
C4- T24?-18	D4-PIK
C5-“BAKAB”	D5-“BAKAB”
C6- WINIKHAAB	D6-8 HAAB
C7-16	D7-yo-K'IN-ni
C8- PAT-ja	D8- aj-WINIK-ki
C9-19	D9-K'IN-ni
C10-4 AJAW	D10-8 KUMK'U
C11-5 AT-li	D11- ti-HA'
C12-OCH-1-“PIKTUN”	D12-OCH-3-WINIK-ki
C13- OCH-1-K'IN-ni	D13- PAT-ja
C14-15 WINIKHAAB	D14-9 HAAB
C15-4 WINIK-ki	D15-4 KIN-ni
C16-9 KAN	D16-12 K'AYAB
C17-13 MAK	D17-WA'-la-ja
C18- K'UH-OK-ki	D18-?

Transliteration

. . . 3 “Triad Glyph” K’UH PAT-ja “PIKTUN” T24-18 PIK “BAKAB ” “BAKAB”
WINIKHAAB 8 HAAB 16 yo-K’IN-ni PAT-ja aj-WINIK-ki 19 “SPIDER MONKEY
HEAD-K’IN”-ni 4 AJAW 8 KUMK’U 5 AT-li ti-HA’ OCH-1-“PIKTUN” OCH-3-
WINIK-ki OCH-1-K’IN-ni PAT-ja 15 WINIKHAAB 9 HAAB 4 WINIK-ki 4 KIN-ni
9 KAN 12 K’AYAB 13 MAK WA’-la-ja K’UH-OK-ki ? . . .

Transcription

. . . *ox lut? k’uh pa[h]t[a]j [jun?] “piktun” waxaklajun pik “bakab” “bakab” [jun?]
winikhaab waxak haab waklajun yok’in pa[h]t[a]j aj winik bolonlajun a jmihk’in kan
ajaw waxak kumk’u atil ti ha’ och jun “piktun” och ox winik och jun k’in pa[h]t[a]j
jo’lajun winikhaab bolon haab kan winik kan k’in bolon k’an lajka’ k’ayab oxlajun mak
wa’laj k’uh ok ? . . .*

Translation

. . . (the) three “triad” gods, were formed (one) “piktun”, eighteen pik, “bakab ” (and)
“bakab”, (one) k’atun, eight tun, sixteen yok’in, were made he (of) twenty, nineteen (and)
zero days, (to) four ajaw eight kumk’u, five bathings? into the water, entered one
“piktun”, entered 3 winik, enter one k’in, were made fifteen winikhaab, nine haab, four
winik (and) four k’in (on) nine k’an twelve k’ayab, thirteen mak, it was stopped/measured
the holy foot of . . .

Commentary

Page 69 of the Dresden is divided into three vertical sections (Figure III.112). The first section (Column A and B) displays two portraits of *Chaak* with associated texts and numeral counts. These portraits of the Rain God are connected to almanacs and glyphs on the preceding pages. The middle section (Columns C and D) is of special interest and consists of two rows of 38 glyph blocks. The first half of the center section (C1-D10) is highlighted in blue paint (C1-D10) and displays nearly identical texts to Columns A and B from page 61 (A1-B10). The highlighted text prominently displays (Förstemann 1904:234) the 4 *Ajaw* 8 *Kumk’u* era date (C10-D10) and describes events surrounding this most sacred of all days. Finally, the third section starts with yet another two rows of glyph blocks (E1-F4) which end in the date 9 *K’an* 12 *K’ayab* (E4-F4). This text is interrupted by a black warrior figure sitting atop the open maw of another serpent with black and red Distant Numbers inhabiting its body curves and a base date appearing at its tail.

The middle column (blocks C1-D10) is a mirror of the first column (blocks A1-B10) on page 61 of the Dresden. For a discussion of the first twenty glyph blocks, I refer

the reader to the previous Page 61 discussion of the codex (Section III.36). Yet it is important to note that the scribe does choose to make some interesting substitutions of certain glyphs that are of equal value. The first is block D4 where the head of the “*bak’tun* bird” (T1033) is substituted for the **CHAN** (T561) variant on the sign on page 61 (B4). Secondly, rather than the *Aj Mih K’in* collocation on page 61 (B9), the scribe chose to substitute (Page 69, C9) the “spider monkey” head with a **K’IN** infix (Figure III.109) on the cheek and followed by a /-**ni**/ suffix (Grofe: 2007:64). The substitution makes one wonder if the “spider monkey scribe” is the very face of the *Aj Mih K’in* deity who is rendered in full-bodied form on Yaxchilan Lintel 48 (B2).

Following the era date at block C11 is the collocation **5 AT-li** possibly meaning “5 bathings” (p.c. Péter Bíró 2008) and may refer to the watery locale where the next two numerical sums that directly follow enter. Next there are two counts. The first count (C12-C13) is a sum of 2,880,061 days. The second count at (C14-D15) totals 111,324 days. As previously explained, these counts are very likely sums that are used to navigate through the Serpent Number Almanacs (Bricker and Bricker 1988; Grofe 2007:129). At blocks C16-D16 the 9 *K’an* 12 *K’ayab* deep time base date for the almanac is reaffirmed.

III.41 Dresden Codex Page 70 Column A (A13-A14, A23-A24), Column B (B13-B14, B23-B24) — Figure III.113

Commentary

Page 70 contains the most era dates on a single page with Columns A, B, C, and D displaying six pairs of Calendar Rounds with 4 *Ajaw* 8 *Kumk’u* day names (Figure III.113). It is important to note that all these columns deviate from the normal reading order and are now read by way of single columns rather than double. Five era dates are located at blocks A13-A14, A23-A24, B13-B14, C1-C2 and D1-D2. An additional era date is located at very the bottom of Column B (B23-24) which shows an error in the *tzolk’in* coefficient of 3 rather than the expected numeral 4 (calculations within Column B do indicate that the correct value is 4 and not 3). Columns A and B use the era base as a benchmark for mathematical calculations and offer no additional information relating to events, subject or place. On the other hand, Columns C and D describe a new event connected with two gods.

At the very bottom of Column A (A23-A24) is prominently displayed the era base. The Ring Number written directly above it indicates to count backward by a value

of 4.6 or 86 days to reach the date 9 *Ix* [2 *K'ank'in*] as indicated by the 9 *Ix* date at block A15. From this new base a Long Count of 8.6.16.12.0 is then counted forward to reach another Calendar Round with the day name of 9 *Ix*. The significance of the day 9 *Ix* is that it is replicating the same day name used at the end of the previous page 69 located at the bottom of Column F, and that is connected to the Serpent Number 4.6.1.0.13.10 9 *Ix* 12 *Sip*. Similarly, the Ring Number directly above the era base date located at A13-A14, counts backward with value of 1.12.6 or 606 days to base date of 9 *Ix* [7 *Xul*], as indicated by the 9 *Ix* date located at block A9. From this new base an Long Count of 8.13.12.10.0 is then counted forward to reach another day name of 9 *Ix*.

The calculations in Column B are similar in logic to Column A just discussed above. At the very bottom of Column B (B23-B24) is prominently displayed the era base. The Ring Number written directly above it indicates to count backward by a value of 10.8 or 208 days to reach the date 4 *Eb* [0 *Mol*] as indicated by the 4 *Eb* date at block B15. From this new base an Long Count of 8.16.14.10.0 is then counted forward to reach another Calendar Round with the day name of 4 *Eb*— a day which is replicating the same day name used at the end of the previous page 69, located at the bottom of Column E, and which is connected to the Serpent Number 4.5.19.13.12.8 4 *Eb* 5 *Ch'en*. The Ring Number directly above the era base date located at B13-B14 counts backward with value of 4.10.6 days to base the date of 9 *Ix* [2 *Ch'en*] as indicated by the 9 *Ix* date located at block B9. From this new base an Long Count of 8.19.11.13.0 is then counted forward to reach another Calendar Round with a day name of 9 *Ix*.

What the calculations in the first two columns verify is that the era base is the primary anchor from which calendar calculations are proceeding. This then gives confidence that the 4 *Ajaw* 8 *Kumk'u* dates written at the top of the next two columns, those of C and D, are indeed the era base.

III.42 Dresden Codex Page 70 Column C (C1-C5) and Column D (D1-D5) —

Figure III.113

Page 70 Column C (C1-C5)

C1-?

C2-8 KUMK'U

C3-WA'-la-ja

C4-K'UH OK-ki

C5-“GODDES O”

Transliteration

. . . 8 KUMK'U WA'-la-ja K'UH OK-ki "GODDES O" . . .

Transcription

. . . [kan ajaw] waxak kumk'u wa'laj k'uh ok "chak chel" . . .

Translation

. . . (on four ajaw) eight kumk'u stopped (the) holy foot (of) "chak chel" . .

Page 70 Column D (D1-D5)

D1-?

D2-8 KUMK'U

D3-WA'-la-ja

D4-K'UH OK-ki

D5- IK' CHAAK

Transliteration

. . . 8 KUMK'U WA'-la-ja K'UH OK-ki IK' CHAAK . . .

Transcription

. . . [kan ajaw] waxak kumk'u wa'laj k'uh ok ik' chaak . . .

Translation

. . . (on four ajaw) eight kumk'u stopped (the) holy foot (of) black chaak (of the west) . . .

Commentary

At the top of page 70, Columns C and D (Figure III.113), is written the era day [4 *Ajaw*] 8 *Kumk'u*. The 260 *tzolk'in* day name 4 *Ajaw* in both lines is eroded off the page yet second part of the day name the 8 *Kumk'u* is quite visible. The era dates are a repetition of the same 4 *Ajaw* 8 *Kumk'u* dates listed at the bottom of Columns A and B. The era date is further validated via computations involving the Long Count dates immediately following each passage. For Column C, the stated Long Count of 10.17.13.12.12 lands on its intended target date 4 [Eb] (the scribe shows only the numeral coefficient of the day name in this case at block C11 as a superfix above a 9 *Ix* date). For Column D, the stated Long Count of 10.11.3.18.14 lands on its intended target date 9 *Ix*.

After the era base date both Column C and D the passage reads "wa'laj k'uh ok" or "was stopped/measured the holy foot of" followed by the names of the protagonists. The verb **WA'** was first interpreted as "erect" by Riese (1990:355) and later deciphered by Schele and Grube (1997:216). The event in passages of the *Dresden Codex* reads

“*wa’laj k’uh ok*” “stopped holy foot” and is followed by the names of the protagonists. The verb **WA’** is used frequently for the “819 day Count verb” in recording its various stations. Nikolai Grube originally proposed the verb read *wa’* (Montgomery1995:175) while Barbara MacLeod (p.c. 2007) more recently the verb as “stood still erect, in the midst of walking.” The entity whose foot was measured in Column C passage is very likely the Moon Goddess while the entity in Column D is definitely a Black *Chaak* who by, his color label, can be associated with the west. Its worth noting that Grofe (2007:276-279) claims that these two deities may relate to lunar and solar eclipse events that take place on or near stated Long Counts in Column C and D.

It was important for the scribe to signify that the foot or step or stride of the god stops on a specific day which will serve as new starting point for the subsequent Long Counts to follow. Also, the color tagging of the *Chaak* god with black label may very well indicate that he is that god who occupies the western (black) quadrant of the sky. Often in the *Dresden Codex*, the cardinal directions and gods are duly noted by tagging them with four corresponding colors, with East as red, North as white, West as black and South as yellow (Thompson 1934:234).

III.43 Dresden Codex Page 71, Section a, bottom of Columns F-G; Page 72, Section a, bottom of Columns A-G; Page 73, Section a, bottom of Columns A-C

— Figure III.114

Commentary

The upper Section a of Pages 71-73 display a series of prominent Ring Numbers connected to twelve distinct Distance Numbers. The Ring Numbers are located at: Page 71, Section a (F7 and G7); Page 72, Section a, (A6, B6, C6, D6, E7, F7, G7); Page 73, Section a (A8, B8, C8). These Ring Numbers signal to the reader that the sum of the Distance Number connected to each respective Ring Number, is subtracted from the base date 13.0.0.0.0 4 *Ajaw* 8 *Kumk’u*. Yet, the era base date that these Distance Numbers supposedly subtract from is absent. The Ring Number target dates that the Distance Numbers count to are missing as well. It is very likely that each respective target date once sat at the top of the page but is now erased due to weathering. The presence of the Ring Number assumes that the era date is present, but without verification via a date or parallel era day event, one can not validate this assumption, and so, the presence of the era base date remains unconfirmed.

Similarly, an unstated era date is found within the newly discovered incised text from Xultun, Guatemala (Saturno et al. 2012) that holds a Ring Number of 4.15.5.14. The presence of this Ring Number strongly implies the existence of an unstated era date. As Saturno et al. (2012:S3) explain:

A small carefully incised text was also made on the east wall, directly upon one of the large painted figures of the mural. This begins with the day record 10 *Kimi*, followed by a column of four numbers: 4, 15, 5 and 14, with the last encircled within a cartouche. The format of this final number is identical to so-called “Ring Numbers” in the Dresden Codex, which were used to express time intervals projected backward from the known base date of the Long Count calendar, 13.0.0.0.0 4 *Ahaw* 8 *Kumk’u*. Subtracting 4.15.5.14 from the 13.0.0.0.0 base date, we arrive at 12.15.4.12.6 10 *Kimi* 4 *Kumk’u*, or September 25, 3207 BCE. The 10 *Kimi* heading the column confirms the calculation, which provides the only solidly readable Long Count date among the writings on the mural’s east wall.

In this case, the 10 *kimi* date at the top of the column is the target date for the calculation and it seemingly confirms the presence of the era base date but there is no way at this point to solidly confirm if the implied 4 *Ajaw* 8 *Kumk’u* base date is tied to the 13th *bak’tun* Period Ending, so it too, remains in doubt.

III.44 Madrid Codex, Page 19, Section b— Figure III.115

Date of Composition: Post Classic.

Era Text: Column 1, block A3?

Archive: Museo de Américas in Madrid Spain.

Photographs: On-line at FAMSI.

Drawings: Villacorta and Villacorta (1930).

References: Förstemann (1902); Vail (2000); Vail and Hernández (2011).

Associated Time Periods: unknown.

Commentary

Page 19, Section b of the Madrid Codex is worthy of mention since it displays elements that evoke era day myth. The page presents an almanac with a *tzolk'in* count of days that runs down Column 1 (A3-A7) and across the page; the red numerals relate to specific *tzolk'in* day names while the black numerals represent Distance Numbers that count between respective days. The almanac begins (Vail and Hernández 2011 after p.c. Hutch Kinsmin) with the day 4 *Ajaw* (Column 1, block A3) and counts five runs of 52 days each; with each run, a new hub is reached corresponding to one of the five days listed in Column 1: 4 *Ajaw* + 52 leads to 4 *Eb* + 52 leads to 4 *Kan* + 52 leads to 4 *Kib* + 52 leads to [4 *Lamat*] + 52 leads back to 4 *Ajaw*; the total run of days (5 x 52) equals 260 days or one full *tzolk'in*; alternatively, a count of 52 *haabs* can be used to count between two respective 4 *Ajaw* dates bringing the count in line with *tun* Period Ending celebrations that in turn, tend to recall aspects the era day myth (see Appendix VII) ⁸⁰.

In the center of Page 19 stands a rendering of Maya temple. At its apex is a vault capstone in the image of a turtle (Hull and Carrasco 2002:28; 2004:134). Standing outside the temple are five gods (God A, God A', God B, God D and God M) who perforate their penises with a bloodied cord (Schele 1976:24). The four gods stretch the cord to the four directions while the fifth deity (God D) passes the rope through his penis and then through the back of the turtle-capstone and down to the base of the building (Hull and Carrasco 2004:134). This "ecliptical cord" is representative of the solar path and serves as the means by which blood is fed to the sun; the sun itself is represented by the **K'IN** glyph wheeling along the cord near the top left of the temple vault (Milbrath 1999:74-75). It can be further argued that the celestial cord falling through the temple vault marks the zenith passage of the sun (Hull and Carrasco 2004:134; Kinsmin 2012:10-12). In sum, the 4 *Ajaw* start date of the almanac coupled with the depiction of the cosmic geometry of the four world quarters and the east-west solar trek (see also Chapters IV.11 and V.3 of the current work that make note of the sun's journey) toward zenith is highly suggestive of the ordering principle underlying the era day story, that of the sun's first solar walk on the first day of the new era. We now come to the end of the Chapter III analysis. A summary list of the era day passages just discussed may be found in Appendix I of the current work. The following Chapter IV offers a discussion of two more illustrated era day accounts from two painted vases.

⁸⁰ For *haab* calculations employed in other Madrid almanacs see Vail (2000).

Chapter IV

A Comparison of Vase K2796 to Vase K7750

IV.1 Introduction

Chapter IV continues the analysis of era day texts with the examination and comparison of two painted vases (Figure IV.1 and IV.3): the Vase of the Seven Gods (K2796) and the Vase of the Eleven Gods (K7750). These two cups display paintings that are mythic “snapshots” of a pivotal era day event in when the gods assemble at the underworld court of God L to renew “order” at the dawn of a new era. Each vase has a rim text and secondary texts with the latter holding an era day passage. Prior research (Coe 1973:106-109; Schele 1992:126-127; Freidel et al. 1993:67-69; Zender and Guenter 2003:104-109; Van Stone 2010:36-38; Tedlock 2010:34-42) of these vases has not made an in-depth comparison between the two objects. The vases are identical in much of their imagery and text, yet they differ in some very important ways. An examination of these differences in text and iconography reveal insights into who owned the vessels, their probable place of origin, and how the mythic episode portrayed relates to the philosophy and political history of their respective owners.

IV.2 Vase of the Seven Gods (K2796) — Figure IV.1-2

Date of Composition: Late Classic.

Era Text: secondary text blocks A1-D1.

Location: unprovenanced but according to the rim dedicatory text and painting style the vase may come from the vicinity of Naranjo (Reents-Budet 1994:155-156).

Photographs: Coe (1973:106-109); Reents-Budet (1994:64); Robicsek and Hales (1981:fig 87); Van Stone (2010:36); Kerr (2011).

Drawings: Coe (1973:106-109); Freidel et al. (1993:68); Tedlock (2010:35).

References: Coe (1973:106-109); Schele (1992:126-127); Freidel et al. (1993:67-69); Zender and Guenter (2003:104-109); Van Stone (2010:36-38); Tedlock (2010:34-42).

Associated Ruler: The dedicatory rim states that *Balam Ajawte'* is the cup's owner.

Associated Time Periods: unknown.

K2796 Secondary Text (A1-C11) ⁸¹

A1-4 AJAW	B1-8 KUMK'U
A2- TZ'AK-ja-ya	B2-IK'-TAN-na
A3- K'UH	B3-CHAN-na-NAL-la

C1-K'UH

C2-KAB-la

C3-K'UH

C4-9 OK-TE'

C5-K'UH

C6-3 LUT?-ti

C7-K'UH

C8-ja-wa-na?-TE'-chi

C9-K'UH

C10-“JGU”

D1-TE'

Transliteration

**4 AJAW 8 KUMK'U TZ'AK-ja-ya IK'-TAN-na K'UH CHAN-na-NAL-la K'UH
KAB-la K'UH 9-OK-TE' K'UH OX LUT?-ti K'UH ja-wa-na?-TE'-chi K'UH
“JAGUAR GOD OF THE UNDERWORLD” TE'**

Transcription

*4 ajaw 8 kumk'u tz'a[h]kjiy i[h]k'ta[h]n k'uh chanal k'uh kabal k'uh bolon [y]okte' k'uh
ox-?-ti k'uh jawan te' chi[j] k'uh “Jaguar God of the Underworld” [k'uh] te' [k'uh].*

Translation

four ajaw eight kumk'u was set in order back then, (the) black-center god, heavenly god,
earthly god, nine “triad” god, deer-with-mouth-agape god, “jaguar of the underworld”
(god), (and) tree (god).

⁸¹ One additional glyph block is added to Column C, the block of the *Te'* God portrait that is located directly to the left of block A1 in a square cartouche. Apparently the scribe ran out of space at the end of Column C and so placed the additional block at the top of the initial column (Zender and Guenter 2003:104-109).

IV.3 Vase of the Eleven Gods (K7750) — Figure IV.3-8

Date of Composition: Late Classic.

Era Text: secondary text blocks A1-C12.

Location: Naranjo, Guatemala?

Photographs: Grube (1998); Van Stone (2010:37 fig. 41-42); Kerr (2011).

Drawings: None.

References: Grube (1998); Van Stone (2010:37).

Associated Ruler: *K'ak' Ukalaw Chan Chaak* of Naranjo

Associated Time Periods: a possible 9.17.0.0.0 6 *Ajaw* 13 *Muan*

K7750 Secondary Text, Blocks A1-C12⁸²

A1-4 AJAW	B1-8 KUMK'U
A2- TZ'AK-ja-ya	B2- IK'-TAN-na
A3- K'UH	B3- CHAN-na-NAL-la
C1-K'UH	
C2-KAB-la	
C3-K'UH	
C4-9 OK-TE'	
C5-K'UH	
C6-3 LUT?-ti	
C7-K'UH	
C8-ja-wa-na?-TE'-chi	
C9-K'UH	
C10-u-ti-ya	
C11-K'IN-ni	
C12-chi-li?	

⁸² The main secondary era day text on the Vase of the Eleven gods is nearly identical to that on the Vase of the Seven Gods. Scribes on K7750 delete the last two god names (the “Jaguar God of the Underworld” and the *Te'* God) and instead mention a locale where the event took place.

Transliteration

4 AJAW 8 KUMK'U ?-ja-ya IK' TAN-na K'UH CHAN-na-NAL-la K'UH KAB'-la
K'UH 9-OK-TE' K'UH OX-LUT?-ti K'UH ja-wa-na?-TE'-chi K'UH u-ti-ya K'IN-
ni-chi-li?

Transcription

4 ajaw 8 kumk'u tz'a[h]kjiy i[h]k' ta[h]n k'u chanal k'u kabal k'u bolon [y]okte' k'uh ox-
?-ti k'uh jawan te' chi[j] u[h]tiji y k'inichil

Translation

four ajaw eight kumk'u was set in order back then (the) black-center god, heavenly god,
earthly god, nine “triad” god, deer-with-mouth-agape god, it happened back then (at the)
great sun place.

A Commentary on Both Vases

IV.4 Background

Unfortunately, both vases were looted from their original locations. The Vase of the Seven Gods (Figure IV.1) surfaced presumably in the art market in the late 1960's and was acquired by the Edward H. Merrin Gallery, New York (p.c. Donald Hales 2009). It was first exhibited in the spring of 1971 at a show held at the exclusive Grolier Club, a private antiquarian book club located at 47 East 60th Street, New York, New York (Coe 1973:102-103). The vase would later be illustrated and analyzed with an extended commentary in Michael Coe's publication *The Maya Scribe and His World* (Coe 1973:106-109) that included four important pre-restoration photographs and a rollout drawing of the vase. The Vase of the Eleven Gods (Figure IV.3-7) came to scholarly attention in the late 1990's and was first published with a small commentary by Nikolai Grube (1988) on the front and back cover of the European Journal “*Mexicon*.” This piece has never been publicly displayed but Justin Kerr (2011) has published post-restoration photographs of all four sides (as well as detailed photos of the dedicatory text) on his on-line Maya Vase Archive. As to ascertaining the original provenance of the cups, there are clues to their origins. Each vase displays a distinct black background; a painting style that according to the chemical analysis of similar vases, originates in an area East of Tikal toward Naranjo (Reents-Budet 1994:155-156). Also according to dedicatory rim text, the owner of K7750 is a well-known king of Naranjo adding to the belief that both cups originated from a workshop at or near that site.

IV.5 Description of the Vase of the Seven Gods

The cylindrically-shaped Vase of the Seven Gods (henceforth also referred to as K2796) reaches a height of 27.5 cm, a diameter of 11.5 cm with a circumference of 36.9 cm (Kerr 2011). Its outer surface boasts a wonderful fine-line painting of seven gods who are gathered in an underworld palace that is inside the incubus of a primordial mountain. The remnants of stucco plaster on the exterior top and bottom edges of the vase suggest that the painting was originally covered completely in a thin layer of stucco (p.c. 2009 Donald Hales).

Coe (1973:107-108) labeled the figures on the vase with numbers 1-7, a system that is also adopted here (Figure IV.9a). God 1 is easily identified as God L who commands the scene as he sits cross-legged on a jaguar throne. He dons an owl feathered headdress (on which sits an owl-like creature with a **9 CHAN** glyphic label near its head), a short cape, a jeweled necklace, a flowery nose jewel, a belt with sky-band signs and a jaguar skirt. God L is recognizable for not only his bird hat but for the cigar he smokes. He is only one of two underworld gods known to brandish lit tobacco (the other is the firefly god). Directly behind him sits a “tribute bundle”⁸³. The throne itself stands on an elevated platform covered with a possible jaguar pelt (or feathers) and framed by vertebrae bones (Coe 1973:107). God L sits within a mountain alcove/temple (see the temple curtains above God L’s head) that is framed behind and below with four zoomorphic mountain masks (complete with the diagnostic “lazy half-shut” eyes and *tun* “grape cluster” infixes of a *witz* animated mountain). The roof of the temple is topped with an “A-frame” like structure bordered by lines of alternating death eyes and crossed bones in the front, and a shell-like water band on the underside. Also on the rooftop sits a bearded caiman-like creature wearing a death-eye collar and has a tail (at the base of which is a **HA’** or “water” glyph is attached) with vegetal scrolls on top and a spotted scroll on the bottom. At the base of God L’s temple sits the head of a “saurian earth god” (Tedlock 2010:37). This god may just represent a flattened-out *witz* mountain mask that is connected to the vertical *witz* masks forming the walls of God L’s Temple. Tedlock (2010:37) likens this god to a “subterranean” earth god that is the counterpart of the “celestial” caiman sitting on the top of the temple.

In front of God L sit six gods (numbered as figures 2-7, see Figure IV.9a) in two horizontal registers with three gods sitting above and below separated by a floor studded

⁸³ The same bundle is labeled on K7750 as **[i]-ka-tzi** for *ikatz* meaning “tribute” (Grube 1998) and it is a common term signifying jade tribute (Stuart 2006b).

with a line of “death eyes.” The manner in which the gods are stacked could be a painted convention that is intended to represent a single line of gods (p.c. Mark Zender 2009). So, due to the economy of space, the scribe stacked the gods rather than portray them in a straight file. All these gods wear capes belts, kilts and nose ornaments similar to God L but in contrast they each possess distinct headdresses and head markings which give clue to their respective identities. God number 2 (the upper rightmost figure) has facial features (a spotted pelt around the mouth, a buck-tooth incisor and a jaguar ear) mark him prominently as the “Jaguar God of the Underworld.” This god wears in his headdress not only a T533 “foliated *ajaw*” jewel but the very prominent *junal* (Jester God) diadem that is worn by historical rulers upon accession to kingly office (Schele and Freidel 1990:411); this diadem implies that the “Jaguar God of the Underworld” has recently been seated into office on or before era day (p.c. Erik Boot 2009). God 3 (the upper middle god) sits directly behind the “Jaguar God of the Underworld” and possesses facial markings (a jaguar ear and jawless mouth with root-like tubers flowing from the mouth) that identify him as the *Te’* God⁸⁴. God 3 (the upper, leftmost figure) bears a large mustache and sports what seems to be conch-like headdress studded by a jade-like jewel. Neither God 3’s facial markings nor his headdress aid in identifying him by way of attributes, so his identity remains unknown⁸⁵. God 5 (the bottom rightmost figure) has a skeletal head with a fleshless lower jaw and wears the *Chapat* (a boney centipede) headdress with crown of death eyes that is capped with a T533 “foliated *ajaw*” jewel and a tuft of feathers. God 5 also has a large knotted cloth around the neck as part of his cape, and (as will be discussed below) has recently been identified as a “skeletal deer” god (Zender and Guenter 2003:104-109). God 6 (the center bottom most figure) wears a distinct “quadripartite” headdress bearing an animated bowl that is stamped with a *k’in* sun sign. The bowl carries a giant “T-shaped” spine. This headdress along with the “fish-barbed” cheeks, shell ear flares, square eye sockets, and bucktooth incisor mark him as the god GI. Finally God 7 wears the *chapat* headdress studded with death eyes that is capped by a “foliated *ajaw*” and a tuft of feathers. Prior to restoration God 7 displayed a prominent **K’IN** logograph (Figure IV.2) on its head band (Milbrath 1999:91). The combination of this sun sign with the *Chapat* headdress definitely marks the god as the *Wuk Chapat Tz’ikin K’inich Ajaw*, who is an aspect of the night sun (Milbrath 1999:91; Boot 2008b:6).

⁸⁴ The *Te’* God is also known as the Patron God of the Month *Pax* who is in this manifestation an anthropomorphic tree (Taube 2005:30; Callaway 2006:93).

⁸⁵ I will however propose (by a process of elimination) that this god may singularly represent the Sky God-Earth God pair.

The six gods before God L bear two more knotted bundles of tribute marked by prominent glyphic signs reading *bolon ek' kab* (translating literally as “nine star earth”). The entire scene possesses a black background suggesting the event takes place at night or in a womb of an underworld mountain. Lastly, the top border of the vase is framed by an unusual sky band. The sky band interior elements (such as the **K'AN** logograph) are in double repeating pairs⁸⁶. Normally sky band interior elements do not repeat side by side but are single, alternating signs (Carlson 1988). One can only speculate if the intent of such pairings is to signal a time before the division of these sky elements took place.

IV.6 A Description of the Vase of the Eleven Gods

The Vase of the Eleven Gods (henceforth referred to also as K7750) is rectangle-shaped with four flat sides and stands at a height of 24.5 cm and a diameter of 15.5 cm (Kerr 2011). It must be noted that there are no pre-restoration photos of K7750 and the vase surface has been over-painted by the restorer making many details illegible or suspect. The vase is almost identical in much of its imagery and text to K2796 but it does vary in the number of god figures, imagery, background color and text.

God L on K7750 appears slightly different. He wears a much longer cape that is painted with black and white geometric designs and the owl feathered headdress (whose feathery crest displays a different numerical coefficient of thirteen rather than nine in front of a **CHAN** logograph). The white temple curtains hanging above God L are painted with different designs in red pigment. In the case of the bundle sitting behind God L, it is clearly marked with glyphs spelling **i-ka-tzi** for *ikatz* (Grube 1998) that is a common term that signifies jade tribute (Stuart 2006b).

K7750 vase contains four additional gods (located along the bottom row) and sit directly behind God 5. Continuing with Coe's numbering system from right to left (Figure IV.9b), these new gods will be labeled 8, 9, 10, and 11. GI and the *Wuk Chapat Tz'ikin K'inich Ajaw* (Gods 6 and 7) are moved to the upper row and now sit directly behind God 4 (Van Stone 2010:40). The four additional gods wear similar shoulder capes and belts as all the other gods but they differ in other manners of dress; they wear skirts that are painted black with white crossed-bones and spiny shell-like circles; they don large black bulbous headdresses that is studded with death eyes and are capped off with a “leafy

⁸⁶ The only other vase with a repeating elements like on K2796 is on another Naranjo cup Kerr vessel K633 that displays the dancing Maize Gods.

ak'bal' sign; below the rim of each headdress is a headband displaying a giant shield-like diadem topped by a feather; the backs of the headdresses are adorned with one or two owl feathers and tufts of possible quetzal feathers capped with tassels; finally a number of disembodied “death eyes” float around the heads of all four characters. God 8 wears a giant frilly collar studded with “death eyes”; a jewel pendant hangs from the collar marked with the death related “percent” sign; his mouth is that of a long beaked bird with jagged-like teeth and from his cheeks fall long “whiskers”; finally sitting in front of this god is an additional tribute bundle marked with a *Bolon Ek' Kab* collocation. God 9 is a near clone of God 8 in dress and facial characteristics. God 10 is similar in all ways to Gods 8 and 9 but wears no collar studded with death eyes. God 11 distinguishes itself from the group with its leaf-nosed upturned snout that is similar to the bat head of the *Sutz'* God; it also wears a tri-lobed ear ornament similar to that God 4 from K2796. As was related in Chapter III.6 of this study, a similar bat god appears as one of the custodial gods of era day on Coba Stela 1.

One obvious difference on K7750 is also the background color. Starting with the side displaying God L's portrait and moving to the right (counter-clockwise from the top view) the background color alternates black-red-black-red. Also K7750 lacks the sky band that frames the top of the painting as it does on K2796. Despite these differences, the overall similarities in iconography of K7750 to K2796 make it very likely that the two vases were fashioned in the same workshop (Grube 1998) or by different scribes quoting the same source document (like a codex).

IV.7 The TZ'AK Event

Parallel events are stated on both vases in the secondary text that accompanies the painted scene (Figure IV.10). In fact, the first fifteen glyph blocks of each passage are exact mirrors of one another. The third glyph in the sequence (block A2) after the era date 4 *Ajaw* 8 *Kumk'u* is the verb. Due to erosion and over painting by the restorer, the parallel verb on the Vase of the Eleven Gods is not as clear but the outline of the verbal suffixing that does survive does identify that it is the same. Scribes used the verb *tz'ak* to describe the pivotal moment, a word that essentially means “to order.” Several scholars have made a study of the word *tz'ak* and the unique pairs of logographs that substitute for the sign within Maya script (Riese 1984:284-5; Knowlton 2002:11-13; Stuart 2003b; Carrasco 2005:460-463; Wagner 2005:30; Wald 2007:139-147). Linguist Robert Wald's

(2007:144) work on Maya verbs is especially pertinent to the discussion and the present commentary will draw much from his in-depth analysis.

The verbal suffixing on the term allows for the plausible derivation **TZ'AK-ji-ya** for *tz'a[h]k-j-ø-iy*, meaning “was set in order back then.” The verb is conjugated in the passive. Why is such a derivation significant? It means that the agent of the action is not specifically stated. It could be any one of the gods. Therefore one does not know who may be directing the organization (even though God L seems to be directing the event from his jaguar throne). A creation event that is a participatory affair where there is no single god or causal force that brings about the world is an idea that is very pan-Mesoamerican. Like in the first chapters of the *Popol Vuh* creation story, the world is built not by a single cosmic force or god but through a conversation between two or more primordial gods (Christenson 2003:70). Specifically, the *Popol Vuh* states that Heart of Sky, along with Sovereign and Quetzal Serpent, “reached an accord, bringing together their thoughts” (Christenson 2003:70).

In the modern Maya lexicon, the word *tz'ak* itself is pregnant with multiple meanings not the least of which are “to order, to order by stacking, to count and to cure” (Barrera Vásquez 1980:871-72). The general meaning across Maya languages of the word is “to order” but it pertains to a specific type of ordering related to the position of objects that follow one another in an unalienable sequence, such as a line of bricks or stack of tortillas (Wald 2007:139-147)⁸⁷. This is no haphazard arrangement but one that indicates order that is inherently sequential, like links in a chain or even the bones in a human arm. For this reason, *tz'ak* can describe the setting and curing of two broken bones. The Cordemex Dictionary (Barrera Vásquez 1980:871-72) also lists *tz'ak* as: “*para siempre, cosa sin fin*” or “for always, a thing without end” as in “*hay trabajos sin fin del mundo*” or “there are works without worldly end” (p.c. Barbara MacLeod 2004). From these few definitions, we see that as a whole *tz'ak* embodies the idea of eternal and meaningful order. To understand the order *tz'ak* encompasses, one must see how Maya scribes employed the word in Maya hieroglyphic script.

Maya scribes used the word in the script as a title for successive rulers of a dynasty and in calendrical contexts dealing with the count of days. For instance, upon taking power, rulers acquired the epithet *tz'akbul* prefixed by an ordinal number (e.g. the

⁸⁷ For dictionary references of the Term *tz'ak* see the compilation made by Wagner (2005) of which I take the following references: (Chol, Aulie & Aulie 1978:121); (Chontal, Smailus 1975:138; Keller & Luciano 1997:260-261); (Chorti, Perez Martinez et al. 1996:227); (Tzeltal, Ara 1986:393; Slocum et al. 1999); (Tzotzil, Laughlin 1975); (Yucatek, Barrera Vásquez 1980: 871-873); (Mopan, Ulrich & Ulrich 1976:223).

10th, 11th or 12th *tz'akbul*) to indicate where they are placed in a line of succession (Figure IV.11a). Another example is found on the rear wall of Palenque's Temple XVIII. Here, the surviving stucco glyphs indicate that the three sons of *Pakal* the Great were depicted beneath their respective name captions (Stuart 2005b:153). Another caption reads *ti[h]m-aj-ø aw-ohl a-tz'ak-bu-ji . . .* for “your heart is pleased that you order them” referring most likely to *Pakal* himself (Stuart 2005b:153). The ordering of the dynasty replicates the order first accomplished by the founding gods and is a duty that is pleasing to the heart of a king.

Early on in the decipherment of the script, it was noticed that the glyph for *tz'ak* was used to indicate a change between two distinct events separated by Distance Numbers and dates (Riese 1984:284-5). For this reason *tz'ak* was given the title the “Distance Number Indicator” since it heralded that a shift in date and event was about to occur and that one passage was ending and another was about to commence (Riese 1984:284-5). An example from Tonina's Ballcourt Panel (Figure IV.11b) illustrates the glyph (B3a, D1b) in this capacity by signaling that there is a division between two main passages that occur on two different dates.

Scribes often super-imposed over the “normal” form of the **TZ'AK** logograph (T573) portraits of two ordered pairs or paired signs, as on Palenque's Tablet of the 96 Glyphs (blocks C1, D8, E7; Figure IV.12). The relationship between these two paired logographs defines the concept of *ts'ak* and as Wald explains “the relationship alluded to by their use, provides a clue allowing the reader to recognize the root word as *tz'ak*” (Wald 2007:144). The logographs can include pictures of cloud/rain, wind/rain, and day/night among others. For instance, the logographs of [MUYAL/HA'], [IK'/HA'], [K'IN/AK'AB], [YAX/K'AN], stand for “cloud/rain”, “wind/water”, “day/night”, “blue-green/yellow” respectively; the glyphs for [K'IN/UH], [EK'/UH], [WAJ/HA'], [KOKAN/CH'ICH'] stand for “sun/moon”, “star/moon”, “tortilla/water” and “stingray spine/blood”; finally [IXIK/WINIK], [CHAN/KAB] stand for “woman/man”, “sky/earth” (Wald 2007:141-147). Some of these paired concepts also have a spatial dimension to them as seen in Río Azul Tomb 12 (p.c. Barbara MacLeod 2008; Stuart 1990). Here the pairs [K'IN/AK'AB] for “day/night” are associated with the glyphs for east and west while the [EK'/UH] for “star/moon” pertain to the glyphs for north and south (Stuart 1987:162; 1990). I suggest that these pairings are an example of the “things for always and without end” explained in the Cordemex Dictionary (Barrera Vásquez 1980:871-72) and embody the meaningful order that was set by the gods at the start of the

new era. The parings are part of a belief system relating to the origin of the cosmos and create “a holistic classification that owes its explanation in myth . . . [and are] a set of beliefs concerning the origin of the world and the permanent course of divine influence over the earth” (López-Austin 1993:174-175). Finally, they are part of a charter of sacred order practiced by the gods and given to man to maintain.

IV.8 Naming of the Gods on K2796

As noted above, the examination of the secondary texts on both vases (Figure IV.10) shows that each record the same opening calendar round of 4 *Ajaw* 8 *Kumk'u* which is then followed by an event expressed by the *tz'ak* action⁸⁸. What comes after the verb is a list of god names. Each name is then followed by the *k'uh* title (Houston et al. 2009:195) signifying that the name proceeding *k'uh* is most definitely a God⁸⁹. Vase K2796 seemingly names eight gods while depicting seven deities. K7750 is even more of a riddle with only six titles given and eleven gods represented. Just how these gods relate to the given titles is still an open question. Classic versions of god names are not well understood at present, and the names of gods that are known are largely based on studies of post-Classic sources like the *Dresden Codex* (Schellhas 1910; Taube 1992). Complexity grows if one considers that a single deity could be the embodiment of several gods (e.g. *Chanal K'uh* is the embodiment of all sky gods and *Kabal K'uh* is the embodiment of all earth gods). This is especially true for the **3-LUT?-ti K'UH** title appearing on the vases. It is also used at Palenque, Caracol and Tikal to introduce a triad of patron gods (Stuart 2005:160).

One fact that is for certain is that the Classic Maya god titles stated do not easily match with the depicted figures. The addition of four more gods on Vase K7750 adds to the confusion. Recently Zender and Guenter (2003:104-109) took up the question of identification and proposed for K2796 that nine gods are actually represented on the vase (rather than seven). The two additional gods are the owl in God L's headdress and the caiman sitting on the roof of God L's Temple. Zender and Guenter (2003:104-109) offer the following identifications: the first god (B1-A3) named is *I[h]k' [Ak'ab] Ta[h]n K'uh*

⁸⁸ The verb on K7750 has been painted over by the restorer and so it must be largely reconstructed yet the /-ja/ and /-ya/ verbal suffixes are discernable.

⁸⁹ The last two names listed on K2796 (blocks C10 and C11) are not followed by the customary **K'UH** “god” title— it seems that the scribe was running out of text space and so deleted the titles (Freidel et al. 1993:69).

and is the Classic name of God L who is pictured sitting on the jaguar throne; the second god (B3-C1) named is the *Chanal K'uh* who is the owl atop God L's hat; the third god (C2-C3) named is the *Kabal K'uh* and is the caiman sitting on the roof of the temple; the fourth god (C4-C5) named is the *Bolon Yokte' K'uh* and is the bottom leftmost god (God 7) that has been previously identified in this study as the *Wuk Chapat Tz'ikin K'inich Ajaw*; the fifth god (C6-C7) named is the central god sitting the lower level (God 6) who is identified as GI (wearing an animated “quadripartite bowl” for a headdress); the sixth god (C8) named is the *Jawante' Chij* who is the lower, right-most god with the “skeletal deer” features (God 5); the seventh god (C10) named is the “Jaguar God of the Underworld” and is the upper rightmost god (God 2); the eighth god named (block D1)⁹⁰ is the *Te' God* (God 3) who sits directly behind the “Jaguar God of the Underworld”; finally on the upper level, leftmost god with the big mustache (God 4) is pictured but not named in the text (Zender and Guenter 2003:104-109).

I agree with Zender and Guenter (2003:104-109) that the names listed on K2796 are for the purpose of labeling the gods depicted. Previous scholars have stated that the first god listed (B1-A3), the *I[h]k' [Ak'ab] Ta[h]n K'u*, was not a god at all, but instead described the mythic place (the “dark heart”) where the scene transpires (Freidel et al. 1993:68). Syntactically speaking, the **K'UH** portion of the title signifies that the name preceeding it must be that of a God and therefore *I[h]k' [A'kab] Ta[h]n* can not be a place as was earlier thought. Also as for the place where the event takes place, the location is named on K7750 as *K'inichil* for “Great Sun Place” (Stuart 2011a:224). The verification that the *I[h]k' [Ak'ab] Ta[h]n* is indeed a name of a god comes from the rim text another Naranjo vessel that of K635 (Coe 1973:102) where the vase rim text states that the *I[h]k' [Ak'ab] Ta[h]n* deity is being “impersonated” (**u-B'AH-AN-[il]**) by the owner of the vessel (Figure IV.13). These “impersonator” expressions always refer to aspects deities (Nehammer et al. 2009) and never to place names.

Based on the present evidence, I tentatively agree with above god name identifications given by Zender and Guenter with the exception of the *Chanal K'uh* and *Kabal K'uh* designations for the bird atop God L's hat and the rooftop caiman. Generally in the script, the names of *Chanal K'uh* and *Kabal K'uh* are always written as a paired couplet and therefore these two names are likely representing a single deity (p.c. Peter B'iró 2008). If this observation of a wedded title holds true, then the scribe on K2796 has

⁹⁰ The *Te' God*'s name is located in a square cartouche just to the left of the day name 4 *Ajaw* (block D1).

painted seven gods and listed seven names and by the process of elimination, the only remaining deity seated amongst all original seven seated figures that is not identified by glyphic title is the top left-most figure (God 4) and therefore the wedded title of *Chanal K'uh* and *Kabal K'uh* very likely falls to him. With this correction in place, the seven gods quoted in the text match the seven gods seated.

Although the name affiliations are still an open question, the general identification of at least four of the gods on K2796 (via their iconographic traits) is more secure. First, there is God L himself seated on his jaguar throne smoking his token cigar and wearing his owl headdress; God L is the only deity known to brandish a lit cigar (Taube 1992:79-88) and is easily identified. The top, rightmost god seated directly in front of God L has a jaguar ear, spotted mouth and buck tooth. These features identify him as the “Jaguar God of the Underworld” (Coe 1973:107-108). GI is the central god of the lower level (God 6) and wears the “quadripartite badge” as a headdress. Also GI wears spondylus shell ear flares (Coe 1973:107-108). Also on the lower level directly behind GI sits the *Wuk Chapat Tz'ikin K'inich Ajaw*, identifiable by the boney maw of the *chapat* centipede for a headdress and a **K'IN** sun glyph on its headband (God 7). As for this second feature, Milbrath (1999:91) keenly points out that the solar emblem on the headband of the *Wuk Chapat* was painted over during the restoration of the vase. Fortunately the pre-restoration photos (Figure IV.2) provided by Coe (1973:106) preserve the solar sign (Milbrath 1999:91)

Many faces of the gods represented on the Vase of the Seven Gods reflect facial features attributed directly to the solar deity (Figure IV.14a.) These characteristics include: square-shaped eye orbits and crossed eyes, a large “Roman” nose, a buck-tooth T-shaped incisor and “barbels” emanating from the corners of the mouth; a **K'IN** sun sign is sometimes stamped on the forehead, arm or cheek (Schellhas 1910:27; Thompson 1970:236; Taube 1992:50-56). As discussed in the preceding paragraphs, the portraits of several solar deities are well identifiable. GI is an aspect of the primordial dawn (Stuart 2005b:167-170) and the “Jaguar God of the Underworld” has ties to the underworld night sun (Thompson 1970:292-93). The *Wuk Chapat Tz'ikin K'inich Ajaw* (Boot 2005a:250–256) is a god found to be statistically related to solar zenith/ nadir (Grofe 2011). Also appearing on the vase is the skeletal deer god *Jawante' Chij*. A skeletal “sun deer” (Zender and Guenter 2003:104-109) with a pair of cross-bones in its eyes (Figure IV.14b-c) is also connected to the sun and serves as a portrait for the **K'IN** sun logograph

(Thompson 1971:366)⁹¹. A skeletal deer head being cradled by the Sun God (similar to scenes where the moon goddess cradles a rabbit) recently identified at Piedras Negras by Chinchilla (2006:40-58) and Stuart (2009) ties the animal directly to the solar deity (Figure IV.14d)). The TE' God's (God 3) large square-shaped eye orbits and crossed eyes (as seen in other portraits) mark him with Sun God features (Callaway 2006:183-186). Therefore at least five of the gods represented on K2796 have direct connections to the sun and in some cases represent the sun during different times of the day. I propose that with this array of sun gods present, what is partially being ordered at the start of the era are aspects of the solar god its related stations. The sun god (in his various forms) has come before God L (the god of merchant travelers, see Taube 1992:79-88) bearing tribute to insure a safe journey. Additionally (as discussed below), the closing passage from the K7750 text, names the location where the scene takes place as *K'inichil*. As Stuart (2011a:224) explains, this mythical locale means "Great Sun Place" and perhaps refers to the sun's realm when all was "still in primordial darkness when Creation occurred" (Stuart 2011a:224). More textual evidence for these sun-related relationships, comes from the rim text of K2796 and K7750 where the owners of the cups declare that they too impersonate the sun by taking on the guise of the *Wuk Chapat Tz'ikin K'inich Ajaw* in what was very likely a ritual reenactment that of the era day event (as discussed below). Conceivably then, what is partially being depicted is the arrangement of the sun's positions and with it the ordering of time via the "solar walk" through the underworld.

IV.9 The Tribute Bundles

The gods bear tribute in the form of bundles. Two bundles are labeled with the enigmatic "star-over-earth" war glyph (p.c. Peter Mathews) prefixed by the number nine (although missing the "water stacks" trickling off the ends of the **EK'** superfix). Another package sitting directly behind God L is labeled *ikatz* meaning "tribute" (Grube 1988; Stuart 2006b). On both vases an additional rectangular-shaped bundle crested with feathers sits beside the tribute bundle of the *Jawante' Chij* (God 5). The contents of this rectangular-shaped, wrapped item offers a vital clue as to the purpose the offering (Figure IV.15a-b). The horizontal banding has circular and woven knots that are similar to knots depicted on carved altars found at Copan that show the cloth bands that once bound

⁹¹ For more deer/sun associations, see Thompson (1967:38) and Milbrath (1999:22, 76) that speak of the Cakchiquel tradition of a swift-footed deer moving the sun across the sky near the winter solstice.

them⁹². Similar knotted bundles are depicted on Yaxchilan monuments and are the objects of “scattering” rituals. David Stuart (2005c) has argued that such bundles were themselves small circular altars wrapped and bound in preparation for Period Ending rituals (Figure IV.15c-h). Plain, circular stone altars of similar size and shape still litter the temple platforms at Yaxchilan (Stuart 2005c). The knots and banding on the wrapped bundle depicted in the vase scene suggest that it is similar to a wrapped altar or perhaps (because of its tall size) a stela⁹³. The common act of wrapping stela/altars prior to their dedication on Period Endings may relate to modern “ethnographic accounts [that] speak of a dangerous, liminal period during which time newly-fashioned sacred objects are extremely susceptible to soul-loss. Such objects are typically wrapped in cloth to protect them until they are stronger . . .” (Stone and Zender 2011:81).

The presence of a wrapped stela within the vase scenes conceptually weds the tribute event to the era day story as related on Quirigua Stela C that recounts the erection of three stone altars. Both of these accounts from Naranjo and Quirigua can be conceptually linked and interpreted as two related scenes that occur during era day activities (Freidel et al. 1993:67). The vase scenes depict the presentation of one of the stela/altar while the Quirigua account records the installation of the monument⁹⁴.

IV.10 Rim Dedicatory Texts on K2796 and K7750

The dedicatory texts differ on each cup (Figure IV.1 and IV.8). The dedicatory texts are typically painted on the upper rim, and relay in part the function of the cup, its contents and who the cup presumably belonged to (Houston et al. 1989:720-726). Vase of the Seven gods belongs to a *Balam Ajawte'* noble while the Vase of the Eleven Gods belongs to a King of Naranjo (Grube 1998). Each owner of the cup acts as the “impersonator” of the night Sun God *Wuk Chapat Tz'ikin K'inich Ajaw*. Here is a translation of the K2796 rim text:

⁹² See altar to Stela 4 (Maudslay 1889-1902:Vol. I, Plate 104).

⁹³ Note that on K7750 the wrappings of the bound stela are spattered with red dots that are most likely signifying a blood offering prior to installation.

⁹⁴ It will be recalled that Freidel, Schele and Parker (1993) interpreted the painted scene from the Vase of the Seven Gods as a depiction “setting of the first of these three stones of Creation” (Freidel et al. 1993:67) with a “stone” represented by one of the three tribute bundles brought before God L and not the wrapped tribute stone as is indicated here. Even so, their general interpretation that the vase scene and the Quirigua text are related is in my estimation, correct.

Dedicatory Formula on the Rim Text of K2796 (A-N)⁹⁵

A-a-ALAY-ya	B-T'ABAY	C-yu-k'i-bi	D-ta-yu-ta
E-IXIM	F-TE'-le	G-ka-wa	H-CHAK-ch'o-ko
I-KELEM	J-u-BAH-ni	K-7-CHAPAT TZ'IKIN	
L-K'INICH	M-?-BALAM-?	N-ya-AJAW-TE'	

Transliteration

**a-ALAY-ya T'ABAY yu-k'i-bi ta-yu-ta IXIM TE'-le ka-wa CHAK-ch'o-ko KELEM
u-BAH-ni 7-CHAPAT TZ'IKIN K'INICH ?-BALAM-? ya-AJAW-TE'**

Transcription

*alay t'ab-ay [u]y-uk'ib ta yut[l] ixim te'[e]l kakaw chac ch'ok kelem ubah[an] wuk
chapat tz'ikin k'inich ?-balam yajawte'*

Translation

here dedicated (is) his drinking cup for *yut* 'maize (and) tree' cacao red? young vigorous,
he (is) the impersonator (of the) seven centipede eagle? (the) great sun? jaguar tree lord

Dedicatory Formula on the Rim Text of K7750 (A-X)⁹⁶

A-a-ALAY-ya	B- T'ABAY-yi	C-yu-k'i-bi	D-ta-IXIM
E-TE'-le	F-ka-wa	G- u-BAH-AN	
H-7-CHAPAT TZ'IKIN		I- K'INICH	J-?-T533
K-KELEM	L-?-CHAAK-ki-li		
M-IK'-? T533/MOK?-ki		N- tz'a-ti	O- pi-tzi-li?
P- K'AK'-KAL			
Q-CHAN-na CHAAK		R-?	S-?
T-?	U-K'AK-TILIW	V- CHAN-na CHAAK	
W- K'UH-"NARANJO EG"		X-SAK-CHUEN?-ne	

Secondary Text of a Parentage Statement Painted on Side II of K7750 (D1-G3)

D1-u-BAH E1-1 TAN-na F1-?

D2-IX-u-ne

D3-BALAM-ma

D4- IX-tu-ba-la

D5- aj-AJAW

⁹⁵ The painted glyph blocks along the rim of the vase are to be read sequentially from A to N.

⁹⁶ The painted glyph blocks along the rim of the vase are to be read sequentially from A to X.

D6- OCH K'IN-ni

D7- tzu-ku

D8- u-MIHIN?

D9-4-wi-WINIKHAAB

D10- ch'a-jo

D11-K'AK' TILIW

D12-9 TZ'AK AJAW

D13- SAK CHUEN

G1 u-tz'i-bi

G2-lo-o-TOK'?

G3-?-xo-ko

Transliteration

a-ALAY T'ABAY-yi yu-k'i-bi ta-IXIM TE'-le ka-wa u-BAH-AN 7-CHAPAT
TZ'IKIN K'INICH ?-T533 KELEM ?-CHAAK-ki-li IK'-?-T533MOK?-ki tz'a-ti pi-
tzi-li? K'AK'-KAL CHAN-na CHAAK ? ? ? K'AK-TILIW CHAN-na CHAAK
K'UH-"NARANJO EG" SAK-CHUEN?-ne

[In an atypical format, the dedication statement continues down Side II of the vase with a parentage statement]:

u-BAH JUN TAN-na ? IX-u-ne BALAM-ma IX-tu-ba-la aj-AJAW OCH K'IN-ni
tzu-ku u-MIHIN? 4-wi-WINIKHAAB ch'a-jo K'AK' TILIW YAX 9 TZ'AK AJAW
SAK CHUEN u-tz'i-bi lo-o-TOK' ? ?-xo-ko . . .

Transcription

*alay t'ab[a]y [u]-uk'ib ta ixim te'[e]l kakaw ubahan wuk tz'ikin chapat k'inich [ajaw] ?
kelem chan chaakil i[h]k' jun? mok? itz'at pitzil ? k'a[h]k ukalaw chan chaak ? ? ?
k'a[h]k tiliw chan chaak k'uh "Naranjo" [ajaw] sak chuen ubah juntan ix une' balam
ixtubal ajaw ochk'in huk? tzuk umihin? chan winikhaab ch'aho(m) k'ak tiliw yax bolon
tsak[bul] sak chuen utz'ib lotok' ?-xok . . .*

Translation

Here (is) dedicated his drinking cup for "maize tree" cacao, he (is) the impersonator (of
the) seven centipede eagle sun lord kelem chan chaakil ek' hun? mok? ballplayer k'ak'
ukalaw chan chaak, (son of?) k'ak' tiliw chan chaak holy narajo lord sak chuen son of
lady une' balam (of) tubal lord (of) ochk'in tzuk child of the four k'atun scatter k'ak' tiliw
(the) new nine tz'akbul white chuen, his writing ? ? . . .

Commentary

The owner of the K7750 was a well known king of Naranjo (Martin and Grube 2000:80) *K'ak' Ukalaw Chan Chaak*. Like on K2796 the king claims to take on the guise of the Underworld Sun of the god *Wuk Chapat Tz'ikin K'inich Ajaw*. As explained previously, this centipede god appears as one of the gods assembled in the painted scene (God 7). On K7750 he sits on the upper register of seated gods and directly below the glyphic collocation of his name recorded in the rim text. This position is in contrast to K2796 where the same god occupies the lower register and seated to the far lower left. This raises the question if the movement on K7750 of the god *Wuk Chapat Tz'ikin K'inich Ajaw* to a location directly under its name phrase was intentional, and was meant to connect the god to its recorded name phrase and to the king who is said to take on its persona. Its common practice in Maya inscriptions for the name phrase of the figure to be placed next to or even touch the figure it identifies. The connection between the name and figure creates causal a link between vessel's owner and the mythic drama depicted in the scene below. If both owners of the cups participated in a ritual reenactment of the era day myth (with the owners taking the role of the Sun God as the *Wuk Chapat Tz'ikin K'inich Ajaw*), then scenes could very well depict a human reenactment of this founding event. In this senerio, humans are depicted dressed in the garb of the gods.

IV.11 The Sacred Locale of *K'inichil*

The final passage of the secondary text on K7750 describes where the gathering of Gods takes place. It reads **u-ti-ya K'IN-ni chi-li** or “it happened back then at *k'inichil*.” Stuart (2011a:224) explains, that *K'inichil* may refer to a mythical locale:

meaning “Great Sun Place,” perhaps referring to the realm of the sun god . . .

Perhaps we are to believe that *K'inichil*, the sun's locale, was still in primordial darkness when Creation occurred.”

The strong presence of Sun God portraiture on the vases coincides with the idea that *K'inichil* is a place of the sun. With these solar references are the Maya alluding to the first solar walk? One can not help but recall at this point a parallel Aztec creation myth (López Austin 1993:118) quoted in Sahagún's (1950-1982) *Florentine Codex* (in Book 7, Second Chapter, p. 4 first full paragraph):

It is told that when yet [all] was in darkness, when yet no sun had shone and no dawn had broken — it is said — the gods gathered themselves together and took

counsel among themselves there . . . “Come hither, O gods! Who will carry the burden? Who will take it upon himself to be the sun, to bring the dawn?”

The *Florentine Codex* preserves what was a pan Mesoamerican myth about the sun’s first journey, on the first day of creation. It makes conceptual sense that the first day of the new era can not be counted without the first solar trek. The sun then, becomes the organizing principle behind the day’s activities and with it the Maya Long Count— a count of *k’ins*)⁹⁷.

IV.12 Historically Dating Vase K7750

Both chocolate cups carry no obvious dates that can be tied directly to Naranjo’s history. The mention of *K’ak’ Ukalaw Chan Chaak* of Naranjo on K7750 narrows the time frame somewhat since the king acceded into kingship in 755 AD and ruled to about 780 AD (Martin and Grube 2000:80), or just over twenty five years. The king’s reign overlaps with only one *k’atun* celebration— the 17th *k’atun* or January 20, 771 AD.

Here it needs to be stated that the majority of era day statements can be attributed to historical Period Ending celebrations (see Appendix VII for a full discussion). Period Endings rites regularly prompted scribes to evoke era foundation events. For instance, the era passages on the Palenque Temple of the Cross group were written in anticipation of the 9.13.0.0.0 8 *Ajaw* 8 *Wo* Period Ending (Stuart 2006a:98). At Copan, Stela 23 and its era passage is part of program of outlaying stela raised by Ruler 12 in anticipation of the 9.11.0.0.0 12 *Ajaw* 8 *Keh* period ending (Martin and Grube 2000:201; Carter 2008:2). If one assumes that K7750 reflects an historical reenactment of the era day founding event in conjunction with a *k’atun* celebration or that the cup was commissioned by *K’ak’ Ukalaw Chan Chaak* for commemoration of a major Period Ending, then the date in question must be 9.17.0.0.0 13 *Ajaw* 18 *Kumk’u* which was the only *k’atun* celebrated by the king⁹⁸.

⁹⁷ Many thanks to John F. Schwaller for sourcing the *Florentine Codex* solar myth and to Barbara MacLeod (p.c. 2011) who pointed out that in its most basic form, the Maya Long Count is a tally of suns.

⁹⁸ The 9.17.0.0.0 Period ending also corresponds close to the Solar Nadir on Jan 21st to which the *Wuk Chapat* has strong associations (p.c. Michael Grofe). The Solar Nadir is recognized by the modern Quiché Maya when the full moon passes directly overhead at midnight (Milbrath 1999:47).

IV.13 Conclusions

K2796 and K7750 contain a complex array of imagery and texts. A close inspection and comparison of the two cups has yielded several valuable insights:

- (1) At least three additional gods (other than those seated before God L) are pictorially represented on the vases including a “caiman” sitting on the roof of God L’s temple and the bird on God L’s hat (Zender and Guenter 2003:104-109). A third “saurian earth” god located at the base of God L’s temple may also be present (Tedlock 2010:37).
- (2) The meaning of the stated event of *tz’ak* embodies an idea of an eternal and sequential order related to cycles of time and gods.
- (3) Five of the assembled gods bearing tribute (the “Jaguar God of the Underworld”, GI, *Wuk Chapat Tz’ikin K’inich Ajaw*, the *Te’* God and the *Jawante’ Chij* have direct links to the sun. Of these five gods the “Jaguar God of the Underworld” wears the “Jester God headband” (p.c. Boot 2010). This emblem of royal office implies that the god has been recently enthroned into a royal seat and if so may rank as the as a senior officiate presenting tribute. Also on K7750 the left-most god on the bottom row, can be identified as the *Sutz’* God, a leaf-nosed bat deity.
- (4) A portion of the tribute brought before God L partly comprises of a bound stela or altar. The appearance of the bound stone provides a conceptual link to the era day story as recorded on Quirigua Stela C, where it is said three altar/throans are bound (*k’al*) and erected (*tz’ap*).
- (5) On K7750 the event is said to happen at place called *K’inichil* or “Great Sun Place” (Stuart 2011a:224) and is a mythic locale that may reflect sun as it travels through the underworld.
- (6) If the scene on the cup portrays a historical reenactment of the era day story, then the owners of the cups may have impersonated the *Wuk Chapat Tz’ikin K’inich Ajaw*.
- (7) The text on K7750 can be positively linked to the Classic Site of Naranjo and to the reign of *K’ak’ Ukalaw Chan Chaak* (755-780? AD). If this era day story was being evoked in conjunction with a *k’atun* celebration that occurred during the reign of this Naranjo king, then it likely occurred on the 9.17.0.0.0 (Jan. 20 771 A.D.). This 17th *k’atun* Period Ending celebration which is the only *k’atun* to overlap with the king’s reign.

Chapter V

Narrative Structure of Era Day Events

V.1 Introduction

Chapter V offers a hypothetical reconstruction of the era day story and is therefore the most challenging aspect of this investigation. This section attempts to reconstruct from tattered fragments of surviving texts, the narrative sequence of era day actions and give order to what appears at first glance, to be a jumbled bag of gods, locales and events. Each of these textual fragments compose a jigsaw of broken shards to be matched and fitted back into a mosaic. But without the original template for reference, one runs a great risk of reassembling a myriad of unintended landscapes ⁹⁹. I proceed with the utmost caution and with the full realization that these mythic narratives certainly varied across time and place. In the exercise of listing and comparing different passages while noting commonalities as well as differences, there is a chance to uncover similarities in episodes, understand enigmatic passages, determine how a myth is unique or a blend of features or to reveal common motifs and identify overall themes (López Austin 1993:261).

V.2 Three Phases of Maya Primordial Myth

Before delving into the events of the era day story itself, it is helpful to outline the basic temporal structure of Maya primordial myth as related by Classic Maya inscriptions. By its very nature, era day cleaves the linear course of the Long Count into two distinct periods that I will call pre-era day myth, and post-era day myth. Therefore all mythic stories fall into one of the three stages: (1) pre-era day, (2) era day, and (3) post-era day. Pre-era day encompasses all time before the era date and conceivably all previous creations. According text on page 60 and 61 of the *Dresden Codex*, the pre-era days that fell shortly before the era date were a time of great upheaval, and reorganization (Callaway 2009; 2011). Era day itself presumably spanned the length of a single day (4 *Ajaw* 8 *Kumk'u*) when the gods gathered together to establish a new order. Inscriptions record at least fifteen distinct events that transpired on era day (see Appendix II for a full

⁹⁹ I am reminded here of the Ancient Chinese tangram puzzle where only seven shards of broken pottery can be reassembled into hundreds of new figurative forms.

count and description of events), including the “changing” of an altar/pedestal and the raising of stone monuments (MacLeod in Schele 1992:232-238; Freidel and MacLeod 2000; Schele 1992; Freidel, Schele and Parker 1993;Looper 1995). Next were a series of post-*era* day events that transpired over the next thousand or so years. At Palenque, scribes note during this time the dedication of sacred temples and the birth and accessions of various gods known as the Palenque Triad (Berlin 1963; Kelley 1965; Schele and Freidel 1990:245-256).

V.3 Unconformity Verses Conformity

Era day inscriptions have a story to tell. The particulars of this story are a matter of some debate. Major objections arise over the premise that *era* day texts constitute a unified creation narrative. The dominant opinion held at present is that these texts run contradictory to one another and therefore do not convey a single creation myth to “pull off the shelf and ponder” (Stuart 2011a:209). In this view, these texts are completely unique to the city in which they originate and for the most part, completely independent from one another. As David Stuart contends, “Creation was very local in its flavor, with different kingdoms and cities claiming different supernatural origins, each a center of the cosmos in its own way” (Stuart 2011a:209) ¹⁰⁰.

There is no doubt that distinct details of the *era* day story are unique and were highlighted at different regions and at different times to suit a particular polity’s religious or political agenda. Such transformations happen in all world mythologies as traits and stories are adapted for a new time, place and regime. Yet, certain myths have a tendency to endure across cultures separated by language, time and geography because they form a “coherent nucleus” that helps explain a cosmic and societal order (López Austin 1993:18). The tattered fragments of *era* day inscriptions that happened to survive argue against the negative presumption of total non-commonality. Appendices II, III and IV of

¹⁰⁰ To be accurate, Stuart (2011a:227) in the very same work also offers a contrary viewpoint acknowledging the strong cultural ties that exists between Maya sites: “We see consistent notions of a cosmic architecture, and mythological events, places, and characters appear throughout the inscriptions of many widely spaced centers. There’s a fair likelihood, then, that Maya culture of the Classic period held to a fundamentally shared cosmology, but one that could accommodate any number of localized stories, characters, and elements” (Stuart 2011a:227). Maya art, architecture, writing and mathematics hold a strong unity of style and practice over time and place. As López-Austin notes in the case of Mesoamerican cosmology, “this description of unity as a historical fact with different degrees of resistance to change, and the importance of variations in time and space, allow us to approach the historical problem of Mesoamerican religion in a more appropriate way (López Austin 1997:5-6).

the current study list the many parallel attributes of the era day story and those mythic events, gods, and sacred locales shared between the early to Late Classic period texts, despite their wide geographic dispersion across the Maya world. In Late Classic times especially, the era event pertaining to the “changing of the altar/pedestal” episode is repeatedly emphasized over a period of four hundred years by cities as far north as Chichen Itza and as far south as Copan (Figure V.1). If there was no shared mythos then this widely shared correspondence would simply not exist over such a long time span. Such commonality suggests that the era day story was part of a shared narrative that became widespread especially during the Late Classic Period and that some degree of conformity did in fact exist. What is missing from the current understanding is the conceptual framework the Maya used to connect the seemingly disparate parts of the era day story. I will propose shortly that the first “solar-walk” (Brotherston 1992:288) of the sun across the sky and through the underworld (east, zenith/north, west and nadir/south) provides a trajectory to order and plot the various era day events. The daily path of the sun as an ordering principle of Maya cosmology is well established, as suggested by Clemency Coggins (1980) in a study of Maya architecture and directional symbolism; by Victoria Bricker (1983) with epigraphic support; and later elaborated by Barbara Tedlock (1992) via ethnographic sources

V.4 Era Day Texts as a Shared Narrative

The story in question might be better understood if it is assessed as part of a shared narrative, as has been done with dynastic texts between cities of the Classic Period (Schele and Freidel 1990; Schele and Mathews 1998; Martin and Grube 2000). From this perspective, era day texts are not to be studied as isolated parts but as part of the same discourse that may span over “several inscriptions, just as iconographic programs may occur across a series of monuments or even structures forming an integrated statement” (Josserand 1986:12). The various strands of mythic stories can be clarified when examined together not as uniquely independent, but as passages derived from a common storyline containing sequential acts as has been done in *Rebirth and Resurrection in Maize God Iconography* by Quenon and LeFort (1997). As Josserand so elegantly stated in her examination of the narrative structure of glyphic history at Palenque, inscriptions are not unlike modern Chol spoken texts in that:

Just as a play or book, there is a plot, sometimes even subplots, and there is some central event, or climax, which is what the play or book is about. The principal characters or actors are introduced, usually at the beginning of the story, and a time frame and setting are established. As the scene changes to another time frame, the different episodes begin, develop, and close within important events, and then pass away, to be replaced by the next scene. Some episodes contain flashbacks to earlier scenes and time frames, but on the whole the story progresses sequentially . . . hieroglyphic texts can be discussed in terms of three major elements: time frame, actors, and the plot (Josserand 1986:12-13).

The common “time frame” under consideration for the era day story is the period of the first day relating to the close of the 13th *bak’tun* period. Logic dictates that the first day of the new era could not have been counted nor the Long Count marked (a tally of *k’in*) without the sun’s initial daily east-west trek across the sky. All events then progress within a diurnal time frame and are related by the organizing principle and mechanics of the sun’s journey on the first day. Furthermore, this journey takes place within the field of “cosmic geometry” of the sacred Maya landscape whose points of reference are the layers of the heavens and the underworld, the sky supports, and the world four quarters; the east to west axis (path of the sun), and the north to south axis (path of the winds) (López Austin 1993:258-259).

V.5 Assigning an Event Line

As to the narrative order of a typical text Josserand also states:

“In Mayan and Mesoamerican narrative texts in general, a plot can be considered to be composed of a series of events that are related to each other temporally even though they may not be presented in a sequential order. These events are said to be on the event line; they are crucial to the development of the story, and all lead up to the central event of the text which is referred to as the peak of the entire text; this is the bare bone structure of the simplest texts, the plots and their climax” (Josserand 1986:12-13 with underline by the author).

Is there a sequential order to era day events? It is rare that multiple era day events are laid out in any sequential order (with one exception being those texts on Quirigua Stela C) to the point that the succession of events can be verified against others and clearly mapped. Yet, it is clear that the recorded events must have occurred within the time frame of the

first day. The sun's "solar-walk" (Brotherston 1992:288) across the four celestial quarters (east/dawn-north/zenith-west/sunset-south/nadir) creates a convenient "event line" on which actions can be charted. All episodes lead from, build up to, and leave a central climatic event— the first dawn of the new era. This "solar-walk paradigm" (Brotherston 1992:271, 288) of the sun's first journey is not only present in other Meso-American creation myths (Thompson 1971:10; Roys 1967:63-65) but is commonly found in North American mythologies as well such as among the Navajo (Moon 1970:191-193; Brotherston 1992:281-285). Such a quincuncial world view of space (Coggins 1980; Tedlock:1992) is not totally imaginative but deeply embedded in ancient and modern Maya world view and ritual practice such as in Tzotzil field and hearth arrangement (Vogt 1976:58) and Chortí New Year and equinoctial rites (Girard 1995:19-85; Stuart 2011a:75-87).

Often, Maya scribes were keen to note where a particular episode took place on this event line when they connected it to a specific location¹⁰¹. Fortunately, a few of these locales can be tied to a specific cardinal zone through which the sun passes on its diurnal journey. If for some reason a place name is not given, then the station which the episode's principal actor or event is known to occupy might serve as a strong indicator as to where the action occurred (e.g. the god GI as the dawning sun may inhabit the eastern quarter of the sky). By situating events along the event line the investigator now has a framework onto which events can be mapped, with episodes corresponding to the east/dawn, north/zenith, west/sunset, south/nadir quadrants in which they occurred.

It is assumed in this study that the climactic event on the era day event line is the close of the 13th *bak'tun* cycle together with the "changing of the altar/pedestal." In general, these two events are considered central since they are the most widely recorded across time and geography. But it is clear that the preference for one event over another and its designation as the climax can change according to the participant's viewpoint or indoctrination. One must always keep in mind that the frequent occurrence of a single event may be due to its chance survival and that another event may very well supersede it in importance as new texts come to light.

¹⁰¹ The names of these locations are charted in Appendix IV of the current work.

V.6 Constructing a Hypothetical Era Day Time Line

A main premise of this work is that era day events took place over the course of the first “solar walk” and that it is possible to sequence these events along a diurnal time line. This begs the question: at what point during the day did scribes commence the calendar count, at sunrise, noon, sunset, or midnight? The question becomes even more tangled with the realization that there is not just one calendar in play but three: the 260 day *tzolk'in*, the 365 day *haab* and the Long Count. Did all three calendars start at the same initial hour or did each have their own distinct starting point (e.g. dawn, noon, sunset or midnight)?

How Maya scribes refer to a Calendar Round holds clues as to the respective starting point for each of the three calendars. Clues to a Calendar Round’s inner workings are found in a spurious set of inscriptions which Proskouriakoff and Thompson (1947) named “Puuc-Style Dates” where the numerical coefficient for the recorded month (the *haab*) was out of synchronization with the *tzolk'in* coefficient by one day. These researchers also noted that “Puuc-Style” dating occurred widely during the Late Classic in northern Yucatan and occasionally in lowland areas as well. In general, they saw the “Puuc-Style” dating as a local variant of a non-conformist calendar system that differed with the lowland calendar system by one day (Stuart 2004). Mathews (2001) addressed the question of “Puuc-Style” dating in his examination of the Dos Pilas Stela 8 text. The inscription recorded a Calendar Round date with a month coefficient that was obviously off by one day. Mathews did not attribute the miscalculation to scribal error or to the aberrant “Puuc-Style” counting system. He proposed that the *tzolk'in* and the *haab* calendars began at different times during the day. This idea assumes that the *tzolk'in* commences earlier than the *haab* or the Long Count cycles (Mathews 2001:406). Specifically, Mathews states:

Moreover, it is possible that the *tzolk'in* day and the *haab* day began at different times in the 24 hour day; if so, we could expect a minority of the dates to not be in the “normal” form. In other words: if, for example, the *tzolk'in* day began at 6:00 P.M., and the *haab* day began at 6:00 A.M., and some event took place at midnight, then the *tzolkin* date would be advanced one position over the *haab* date. Thus. . . the date 9.14.15.2.3 2 Akbal 1 Kankin would after 6 P.M., be 9.14.15.2.3 3 Kan 1 Kankin—as recorded at H13-I13—and not until 6.00 A.M. the following day would the next “normal” date begin, viz., 9.14.15.2.4 3 Kan 2 Kankin (Mathews 2001:406).

What Mathews posited was that the “Puuc-Style” dating was not an aberrant counting system, but rather the “error” of minus-one-day, revealed by the inner mechanics of a Calendar Round date. Mathews also noted that on nine examples of aberrant dates a “half-darkend *k’in*” sign preceded the errant date and posited that this glyph signals a nighttime event (Mathews 2001:406) ¹⁰². In his final analysis he postulated a likely scenario for start times: the *tzolk’in* commenced at a prior sunset while the *haab* commenced at the following dawn.

David Stuart later championed Mathews’ insights with a paper titled *The Entering of the Day: An Unusual date from Northern Campeche* (Stuart 2004) where he examined the inscription carved on a door lintel from the Hecelchakan Museum reading **4 Muluk K’IN o-chi-ya tu-16 MAK**. As Stuart noted:

The remarkable feature of the date record is the sign grouping **o-chi-ya** located between the day and the month glyphs. This can only be the verb *ochiiy*, ‘it entered’ . . . The mention of the day ‘entering’ within the *haab* suggests that we have been misled in thinking that northern Puuc-style dates simply reflect a localized structural change in the reckoning of time. Could it be that many of the ritual events commemorated in Puuc inscriptions—the vast majority of them are dedication rites—actually took place in the window of time between the turn of the *haab* and the arrival of the *tzolkin*—perhaps between midnight and dawn? . . . If these were nighttime rituals, scribes of the Puuc region may have been especially diligent in utilizing the subtle mechanisms of the Calendar Round to specify just when certain events took place within our own conception of a 24-hour day . . . (Stuart 2004:1-2).

Stuart continues to say that it is possible that the “Puuc-Style” dates are not a separate system after all but a calendar containing “nighttime indicators” recording night rituals. Yet, he differs with Mathews in theorizing the turning point between the two calendars and favors a separation by six hours rather than twelve, with the *haab* starting at midnight and the *tzolk’in* at dawn.

What is the proper turning point for each of the three respective calendars and how many hours they are out of sync from each another? The question will be resolved in two parts: (1) in a translation for “the half-darkened *k’in*” sign and (2) by looking at how a count of days (*k’ins*) is related to the *haab* and the Long Count. Recently, MacLeod and

¹⁰² See Yaxchilan Stela 18 (A1-A3) for just such a date.

Schele (2005) jointly investigated and updated a catalogue of “Puuc-Style” dates within Maya inscriptions. They compiled additional evidence that the *haab* and the Long Count do indeed begin at sunrise and that it is the *tzolk’in* that is out of step by twelve hours. The first line of evidence concerns a reading for the “half darkened *k’in*” sign that often accompanies aberrant dates, as previously noted by Mathews. MacLeod (p.c. 2008) noted she proposed a reading in 1991 for this “half-darkened *k’in*” sign; the collocation is sometimes spelled **yi-K’IN-ni** and suggested the readings of *chah-k’in* or *yi’h-k’in* (for the variant with T135 /cha/ superfixed “darkened sun” and “aged sun”¹⁰³. A darkened, aged, or black sun lends itself to the idea of “sunset” rather than just “night” and MacLeod posited that this glyph reflects a sunset position (MacLeod and Schele 2005)¹⁰⁴. Additionally the logograph **PAS** for “dawn” is further evidence that Maya scribes recognized the horizon position of a dawning sun (p.c. MacLeod 2010). In her analysis and comparison of the errant dates on Dos Pilas Stela 8 and Yaxchilan Stela 18, MacLeod (p.c. 2005) saw a similar error pattern emerging. She noted:

[The Yaxchilan date of] 3 Eb given on the monument represents a *tzolk’in* that has advanced by one, ahead of the *haab*, just as 3 K’an at Dos Pilas represents a move forward by one in the *tzolk’in*. These two dates represent the same pattern. Both of these have moved ahead not only of the *haab* but also of the Long Count. I really think this is the key. The Long Count counts *days*—that’s what the ‘ones’ unit is . . . *k’ins*! . . . The monuments record not only a shift forward in the *tzolk’in* but also a half-darkened *k’in* sign—further evidence that the out-of-whack Calendar Round refers to a night event which immediately follows the correct Type III [normal] date in each case . . . It is the *tzolk’in* which is out of step. Furthermore, it just makes good conceptual sense that a system that counts *days* as the Long Count does should start those days when the day begins— at sunrise. Therefore, the only way the *tzolk’in* can get out of step is to change at sunset. I truly believe that this plus the specific mention of the half-darkened *k’in* (a perfect image of sunset) in these two critical cases is all the proof we need (p.c. MacLeod 2005).

For the sake of building an event-line horizon and plotting the starting points of all three calendars, the current study agrees with a combined Mathews and MacLeod/Schele

¹⁰³ A reading of **yi-K’IN-ni** as “black of the day” has also been recently proposed (Houston, Stuart and Chinchilla 2001:395).

¹⁰⁴ the **yi-K’IN-ni** sign also interchanges with glyph G9 of the Lords of the Night)

hypothesis that: (1) the *haab* is in-step with the Long Count, (2) the *tzolk'in* is out-of-step with the *haab* by 12 hours, and (3) the *tzolk'in* begins at sunset 12 hours prior to *haab* at dawn.

This combined hypothesis now allows the proposal of a timeline corresponding to the solar trek. First, the two parts of the Calendar Round, the *tzolk'in* and the *haab* have separate starting points with the *haab* commencing at dawn and the *tzolk'in* starting at sunset 12 hours earlier. The Long Count (a count of suns) is synchronized with the *haab* solar calendar and therefore begins at dawn as well. A charted time-line (with a twelve hour shift between the *tzolk'in* and the *haab*) for the base date 4 *Ajaw* 8 *Kumk'u* is as follows:

4 AJAW — DUSK (*tzolk'in* cycle starts) [+ 12 hours] DAWN (*haab* day & Long Count cycle start) [+12 hours] DUSK (*tzolk'in* cycle completes) [+ 12 hours] DAWN (*haab* day & Long Count day cycle complete the first day) — **8 KUMK'U**

Only when the *tzolk'in* and *haab* have both completed their respective 24 hour cycles (totaling a span of 36 hours due to the 12 hour shift between both calendars) can the day be recorded as a complete elapsed day 4 *Ajaw* 8 *Kumk'u*. If the day records an action after the *tzolk'in* has finished its 24 hour cycle but prior to the *haab* completion, then the day and month coefficients of the Calendar Round are recorded out-of-sync by one day and therefore record a *tzolk'in* coefficient advanced by one day ahead of the *haab* date ¹⁰⁵.

V.7 Reconstructing the Era Day Story

It is the aim of this chapter is to attempt to tentatively reconstruct a basic story from the corpus of era day accounts. Having collected all known instances of the era day story and established that they do carry common elements, and having proposed a basic narrative that follows a 36 hour conceptual time line, we can now attempt to place the actors and events into a hypothetical version of the tale. As discussed, the story naturally divides itself into four basic episodes with events occurring along the time frame of the solar walk; at dawn, midday, dusk and midnight. A question immediately arises as to

¹⁰⁵ A calendar with embedded with “nighttime indicators” (Stuart 2004) indicating current time within a 36 hour time span is disturbing to say the least. Past researchers have agreed in principle that the Maya never designated a present day or as an unfinished unit, but always treated the day as elapsed time; as Morley noted “the day recorded is yesterday because to-day can not be considered an entity until, like an hour of astronomical time, it completes itself and becomes a unit, that is yesterday” (Morely 1975:470). The Puuc dates are heretical indeed!

what details will be kept and what details will be barred. One scenario might be based on the degree of uniformity— the details stated will be dependent on the degree of shared elements between passages. In this arrangement, important elements might be lost in translation. To avoid this mishap, I will propose four versions of the era day story (titled Version I through IV). The first three versions will be based on the Historical Time Periods in which the passages are found (Early Classic, Late Classic and Post Classic). The fourth version will combine all passages from all three periods and exclude nothing.

The first action under consideration is the “changing of the altar/pedestal” event. Because of its wide-spread popularity over time and space, this event is considered to be the “main event” and the episode that all other events lead up to, or digress from. Coba Stela 1 and Quirigua Stela C agree with respect to the order of events: the “altar/pedestal” event is directly followed by the closing of the 13th *bak’tun* cycle. As Tedlock (2010:53) remarks, it is likely that the “changing of the altar/pedestal” occurs first in the sequence and is then followed by the placement of the three stones; with the stones set, the close of the 13th *bak’tun* cycle takes place. As previously discussed, the close and start of the Long Count cycle and its 13th *bak’tun* cycle are synchronized with the start of the *haab* cycle and both commence at dawn.

Next we must place the congress of gods depicted on the Vase of the Seven and the Vase of the Eleven Gods and the action of the “ordering” of deities. The event is said to occur at *K’inichil* or “Great Sun Place” (Stuart 2011a:224) a locale not connected to any obvious cardinal direction. What is apparent is that the event occurs within the underworld court of God L. The mountain interior of the court argues that events take place at night when all is plunged in darkness. The decisive clue as to the scene’s placement along the plot-line comes from identification of the wrapped stela and tribute bundles brought before God L (see section IV.9 of Chapter IV). Logic dictates that the bundled stela on the vases presages its subsequent “planting” as noted on Quirigua Stela C. Therefore the tribute presentation must take place sometime in the pre-dawn hours and prior to the three stones being “bundled” and set in place at dawn.

Another event that appears somewhat plausible to place is the attack upon God N by the *Bolon Yokte’* as described on page 60 of the *Dresden Codex*. God N is well known in Classic and Late Classic sources for his Atlas-like abilities to hold apart sky from earth (Thompson 1970:276). The attack on God N suggests the possibility of an imminent sky-collapse. Such foreboding and impending doom frequently arises during liminal hours and on the cusp of major calendar cycles such as at the turn of a *k’atun* or even the last

five days of the solar year— the so-called “*xma k’aba k’in*” or “days of no name” that were considered of sinister and grave portent (Gates 1978:59-60) when a god’s power could be diminished ¹⁰⁶. Dresden Page 60 (C2-B2) also relates that the count of twenty, the *Aj Winik*, is “wounded” and the “end of days” are near as the previous era comes to an end. It seems likely then, that an attack by the *Bolon Yokte*’ seriously weakens the God N sky-pillar and that this time of instability occurs in the predawn hours of the first day and shortly before the renewal of the era.

V.8 Hypothetical Reconstruction I, Early Classic Texts ¹⁰⁷

DAWN

(it happened the) “unknown event” (at the) edge sky (the) first/new

“three-stone” place

(by) GI (the) *yax wayib* (of) *chaak*,

(the) sky god-earth-god arrived (at the) white “bone-flower” place

(this) was tended . . . (by) God D, (and) it happened (at) *wak chan* . . .

V.9 Hypothetical Reconstruction II, Late Classic Texts

PRE-DAWN

(in the court of God L) it was ordered (the) black-center god, (the) heavenly god, (the) earthly god, (the) *bolon yok te*’ god, (the) “triad” god, (the) *jawante’chi* god, (the) “jaguar god of the underworld” (and the) *te*’ (god) ¹⁰⁸

(and the “three long-beaked” gods) (and the *yax sutz*’ god) ¹⁰⁹

¹⁰⁶ As López Austin (1993:134) relates, on these year ending ceremonies during the last five fateful days “a god’s strength diminishes with the passage of time.”

¹⁰⁷ All these Early Classic texts are taken from the “Yax Wayib” Mask.

¹⁰⁸ Naranjo K2796

¹⁰⁹ Naranjo K7750 these gods are represented by their portraits only and are not cited in the text.

it happened (at the) great sun place ¹¹⁰

DAWN

(the sum of) thirteen *pik*, zero *winikhaab*, zero *haab*, zero *winal*, zero *k'in* ¹¹¹

G9 edge (of the) book, since the 23 day moon arrived, (and the) “nth” lunation was completed, (glyph X) was its young name, (counted as a) thirty (day moon) ¹¹²

it was tied/bound, the three-eleven *pik* (cycle) ¹¹³

was changed-renewed (the) altar/pedestal ¹¹⁴

thrice was bound the stone ¹¹⁵

they were companioned or bathed (the) “paddler gods” (the) *nahjo'chan lord(s)* ¹¹⁶

they erected (the) “jaguar throne” stone, (the) “paddler gods”, it happened (at the) *nahjo'chan* ¹¹⁷

he erected (the) “serpent” “throne” stone (the) black-?-“god”, it happened (at the) earth “ear-flare” place ¹¹⁸

then it happened God D bound the water “throne” stone ¹¹⁹

it happened (at the) sky edge (the) new “three stone” place ¹²⁰

¹¹⁰ Naranjo K7750

¹¹¹ Coba St. 1,5,28 —Quirigua St. C

¹¹² Coba St. 1

¹¹³ As implied by Chichen Itza, Caracol Panel 1

¹¹⁴ Chichen Itza Panel 1—Coba St. 1—Copan St. 23—La Corona Alt. 4—Palenque Temple of the Cross & Temple of the Sun— Quirigua St. C— Piedras Negras Alt. 1

¹¹⁵ Quirigua St. C

¹¹⁶ “Tila” St. A

¹¹⁷ Quirigua St. C

¹¹⁸ Quirigua St. C

¹¹⁹ Quirigua St. C

¹²⁰ Chichen Itza Panel 1—Coba St. 1—Copan St. 23—Palenque Temple of the Cross and Temple of the Sun— Quirigua St. C— Piedras Negras Alt. 1

it was finished thirteen *pik* ¹²¹

(together with) seven “jaguar god of the underworld” (and the) blue/green bat ¹²²

(and the) “firefly god” ¹²³

It was tended (by) the six sky lord(s) ¹²⁴

NOON

G1 descended from the sky ¹²⁵

[Additional actions with no placement]

fire was speared at *mih ik' nal* ¹²⁶

(the) “square-nosed-beastie” was downed it was tended by (the) “paddler gods” ¹²⁷

V.10 Hypothetical Reconstruction III, Post Classic Texts

PRE DAWN

God N was (“unknown event”) (and) it was tended by his first *chak bolon yokte'*,
“wounded” (were the) twenty days, ended are (the) days (by his) flint-shield/war (of the)
“possum” *bakab* ¹²⁸

¹²¹ Coba St. 1—Copan St. 23—Palenque Temple of the Cross — Quirigua St. C, Zoo. G & Alt. P'—Piedras Negras Alt.

1

¹²² Coba St. 1

¹²³ Dos Pilas Panel 18

¹²⁴ Quirigua St. C

¹²⁵ Palenque Temple of the Cross

¹²⁶ Quirigua Alt. P'

¹²⁷ Quirigua Alt. P'

¹²⁸ Dresden Codex page 60

Stopped (the foot of) God L, (and the) *chak ek'* ten-sky, *chak ek'* , “wounded” *k'awiil*,
“wounded chak “*bolay*”, “wounded” maize god, “wounded” T226 god, “wounded”
T1055-god ¹²⁹

DAWN

Stopped (the) holy foot (of the) moon goddess ¹³⁰

emerged (the) *pik*, entered into (the) water fifteen *winikhaab*, nine *haab*, one *winik* (and)
three *k'in*, nineteen-enter-water-(place) (it is) *aj winik*, entered into (the) split? mountain
at [the] water ¹³¹

(it happened) 5 *bathings* in the water, entered 1 “*piktun*” entered 3 *winik*, entered one *k'in*,
was made 15 *winikhaab* 9 *haab* 4 *winik* 4 *k'ins* ¹³²

SUNSET

Stopped the holy foot (of the) black *chaak* ¹³³

V.11 Hypothetical Reconstruction IV, a Composite of Early Classic, Late Classic and Post-Classic Texts

PRE DAWN

God N was (“unknown event”) (and) . . . his first *chak bolon yokte'*, “wounded” (were
the) twenty days, ended are (the) days (by his) flint-shield/war (of the) “opossum”
bakab ¹³⁴

Stopped (the foot of) God L, (and the) *chak ek'* ten-sky, *chak ek'*, “wounded” *k'awiil*,
“wounded chak “*bolay*”, “wounded” maize god, “wounded” T226 god, “wounded”
T1055-god ¹³⁵

¹²⁹ Dresden Codex page 24

¹³⁰ Dresden Codex page 70

¹³¹ Dresden Codex page 61

¹³² Dresden Codex page 69

¹³³ Dresden Codex page 70

¹³⁴ Dresden Codex page 60

¹³⁵ Dresden Codex page 24

(in the court of God L) it was ordered (the) black-center god, (the) heavenly god, (the) earthly god, (the) *bolon yokte'* god, “triad” god, *jawante'chi* god, “jaguar god of the underworld” (and the) *te'* (god) ¹³⁶

(and the “three long-beaked” gods) (and the *yax sutz'* god) ¹³⁷

it happened (at the) great sun place ¹³⁸

DAWN

(the sum of) thirteen *pik* zero *winikhaab* zero *haab* zero *winik* zero *k'in* ¹³⁹

G9 edge (of the) book, since the 23 day moon arrived, (and the) “nth” lunation was completed, (glyph X) was its young name, (counted as a) thirty (day moon) ¹⁴⁰

(it was tied/bound, the three-eleven *pik* cycle) ¹⁴¹

it was changed (the) altar/pedestal ¹⁴²

thrice was bound the stone ¹⁴³

they were companioned or bathed (the) “paddler gods” (the) *nahjo'chan* lord(s) ¹⁴⁴

they erected (the) “jaguar throne” stone (the) “paddler gods” it happened (at the) *nahjo'chan* ¹⁴⁵

¹³⁶ Naranjo K2796

¹³⁷ Naranjo K7750 these gods are represented by their portraits only and are not cited in the text.

¹³⁸ Naranjo K7750

¹³⁹ Coba St. 1,5,28 —Quirigua St. C

¹⁴⁰ Coba St. 1

¹⁴¹ Chichen Itza Panel 1

¹⁴² Chichen Itza Panel 1—Coba St. 1—Copan St. 23—La Corona Alt. 4—Palenque Temple of the Cross & Temple of the Sun— Quirigua St. C— Piedras Negras Alt. 1

¹⁴³ Quirigua St. C

¹⁴⁴ “Tila” St. A

¹⁴⁵ Quirigua St. C

he erected [the] “serpent” “throne” stone (the) black-?-“god”, it happened (at the) earth
“ear flare” (place) ¹⁴⁶

then it happened God D bound the water “throne” stone ¹⁴⁷

it happened (at the) sky edge (the) new “three-stone” place ¹⁴⁸

were finished thirteen *piks* ¹⁴⁹

(together with) seven “jaguar god of the underworld” (and the) blue/green bat ¹⁵⁰

the “fire fly god” ¹⁵¹

(the) sky god-earth-god arrived (at the) “bone flower”-place ¹⁵²

(this) was tended . . . (by) God D, (and) it happened (at) *wak chan* ¹⁵³

it was tended [by] the six sky lord(s) ¹⁵⁴

(it happened the) “unknown event” (at the) edge sky (the) new “three-stone/hearth” place
(by the) god GI (the) *yax wayib* (of) chaak ¹⁵⁵

Stopped (the) holy foot (of the) moon goddess ¹⁵⁶

¹⁴⁶ Quirigua St. C

¹⁴⁷ Quirigua St. C

¹⁴⁸ Chichen Itza Panel 1—Coba St. 1—Copan St. 23—Palenque Temple of the Cross and Temple of the Sun— Quirigua St. C— Piedras Negras Alt. 1

¹⁴⁹ Coba St. 1—Copan St. 23—Palenque Temple of the Cross — Quirigua St. C, Zoo. G & Alt. P’—Piedras Negras Alt. 1

¹⁵⁰ Coba St. 1

¹⁵¹ Dos Pilas Panel 18

¹⁵² “Yax Wayib” Mask

¹⁵³ “Yax Wayib” Mask

¹⁵⁴ Quirigua St. C

¹⁵⁵ “Yax Wayib” Mask

¹⁵⁶ Dresden Codex page 70

emerged (the) *pik*, entered into (the) water fifteen *winikhaab*, nine *haab*, one *winik* (and) three *k'in*, nineteen-enter-water-(place) (it is) *aj winik*, entered into (the) split? mountain at [the] water ¹⁵⁷

5 *bathings* in the water, entered 1 “*piktun*” entered 3 *winik*, enter one *k'in*, was made 15 *winikhaab* 9 *haab* 4 *winik* 4 *k'ins* ¹⁵⁸

NOON

G1 descended from the sky ¹⁵⁹

SUNSET

Stopped (the) holy foot (of the) black *chaak* ¹⁶⁰

[Additional actions with no placement]

(the) fire was speared at *mih-ik'-nal* ¹⁶¹

(the) “square-nosed-beastie” was downed, it was tended by the “paddler gods” ¹⁶²

V.12 A Synopsis and Commentary of the Hypothetical Reconstructed Era Day Story

The fragments of the era day story that have managed to survive seem at first as tangled as the patch of jungle vine where they lay hidden under for well over a millennia. After listing the various story threads upon the page and plotting them along a time-line of the “solar walk” themes begin to emerge. The overarching theme of is the establishment of cosmic order and the arrangement of gods, altars, and time cycles.

The story begins at dusk when the world is plunged into darkness ¹⁶³. The basic subject matter of the pre-dawn hours of era day is the dissolution of old gods and cycles

¹⁵⁷ Dresden Codex page 61

¹⁵⁸ Dresden Codex page 69

¹⁵⁹ Palenque Temple of the Cross

¹⁶⁰ Dresden Codex page 70

¹⁶¹ Quirigua Alt. P'

¹⁶² Quirigua Alt. P'

¹⁶³ As previously explained, the Calendar Round cycle begins with the *tzolk'in* calendar at sunset twelve hours prior to the start of the solar *haab* calendar that starts at dawn.

and the reordering of godly duties. If the clash between God N and the *Bolon Yokte'* is any clue, then the pre-dawn hours are a time when forces of chaos attack the pillars holding the sky from earth, and by doing so, presumably threaten the space-time continuum ¹⁶⁴. A “wounding” of the count of twenty days also occurs ¹⁶⁵. Other gods that are said to be in a “wounded” state are the: *K'awiil*, *Chak “Bolay”*, the Maize God, T226 God and the T1055 God ¹⁶⁶, perhaps they too are casualties of the *Bolon Yokte's Tok Pakal* ¹⁶⁷. Shortly thereafter inside the incubus of a primordial mountain (the realm of *K'inichil* ¹⁶⁸, the “Great Sun Place”) custodial gods of time (themselves the embodiment of eternal cycles ¹⁶⁹) journey to the underworld court of God L for a great council ¹⁷⁰ where each is ordered, perhaps according to his respective duty. The identifiable gods sitting before God L include the “Jaguar God of the Underworld”, Te' God, Sky God, Earth God, *Jawante'chi*, GI, *Bolon Yokte'* (in the guise of the *Wuk Chapat Tz'ikin K'inich Ajaw*) ¹⁷¹, the bat god *Yax Sutz'* and “three long-beaked” gods ¹⁷². These gods do not come empty handed, they bear tribute bundles and a bound altar ¹⁷³ to be used in a stone “binding” ritual that will commemorate the closing of the 13th *Pik* cycle and the start of a new era.

Other gods are present as well but it is not clear if they participate in the actions within God L's court or elsewhere. They are the “firefly” god “*Kukay*” *Ek'* ¹⁷⁴, the moon goddess *Chak Chel* ¹⁷⁵ and *Chaak* ¹⁷⁶ — the latter are envisioned as biped travelers; the rhythm of their steps are measured along the celestial road by a marking off of their footstep ¹⁷⁷ or “holy foot.”

It is stated that at the cusp of the new dawn a “changing” of the *k'ojob* is required ¹⁷⁸. The *k'ojob* seem to be related to a series of flat-topped, circular stone altars

¹⁶⁴ Dresden Codex page 60, Section a, (C2)

¹⁶⁵ Dresden Codex page 60, Section a, (C2).

¹⁶⁶ Dresden Codex page 24, (C8-C12)

¹⁶⁷ Dresden Codex page 60, Section a, Column C.

¹⁶⁸ Vase K7750 secondary text (C11-12)

¹⁶⁹ This inference is made by the event *ts'ak* being defined by the Cordemex Dictionary (Barrera Vasquez 1980:871-72) as: “para siempre, cosa sin fin” or “for always, a thing without end” as in “hay trabajos sin fin del mundo” or “there are works without worldly end.”

¹⁷⁰ Vases K2796 and K7750

¹⁷¹ Vases K2796 and K7750 secondary texts name all these gods, see Chapter IV of the current work.

¹⁷² *Yax Sutz'* and “three long-beaked” gods are pictured but not named on K7750.

¹⁷³ The evidence for a bound stela/altar as part of the tribute is discussed in Chapter IV of the current work.

¹⁷⁴ Dos Pilas Panel 18 (A3).

¹⁷⁵ Dresden Codex page 70 (C5).

¹⁷⁶ Dresden Codex page 70 (D5).

¹⁷⁷ Dresden Codex page 24, (C3).

¹⁷⁸ Chichen Itza Panel 1, Coba St. 1, Copan St. 23, La Corona Alt. 4, Palenque Temple of the Cross & Temple of the Sun, Quirigua St. C, Piedras Negras Alt. 1.

upon which god effigies might stand ¹⁷⁹. These stone pedestals or altars are seemingly changed at the turn of a great cycle. The next step is for the gods to mark what appears to be a three-fold division of space by the placement of three altars at three distinct locales ¹⁸⁰. Three sets of gods (“Paddler Gods”, “Saurian?” and *Itzamnaj*) install three stone altars/thrones (“Jaguar”, “Serpent” and Water). These actions are part of a *k’al* “stone binding” ceremony that include a pair of “stone plantings” (*tz’ap*) that are similar to stone dedications related to *k’atun* period endings when twenty stones (*tuns*) are ritually “bound” together (Stuart 2011a:219). The first stone is “jaguar altar/throne” is planted by the “Paddler Gods” who appear perhaps out of the “misty morning clouds” ¹⁸¹ at a locale named the *nah jo’chan* (that has connections to northern realm of the sky ¹⁸²). The second “serpent throne” is placed at the so called “earth-earflare” locale. The third altar/throne is a “water stone” and is connected perhaps to a watery underworld surface. The placement of these three stones reflect a three-fold division of space that is similar to a three-tired division of the cosmos that is so basic to Mesoamerican worldview (Stuart 2011a:221-222). Perhaps the spatial arrangement reflects the three part journey of celestial bodies (east-zenith-west) as they move across the sky (Stuart 2011a:221-222). This newly created threefold space is sanctioned the “sky edge new [‘three-stone’] place.” All this work is supervised by a group of gods called the *Wak Chan Ajaw* ¹⁸³ who very likely reside in the mythic realm of the *Wak Chan*. With the changing of these altars the sun dawns and 13th *pik* cycle comes to a close (Tedlock 2010:53).

Other calendar cycles are noted at the close of the era. G9 is present ¹⁸⁴ in the Lord of the Night Cycle; the moon is calculated as 23 days ¹⁸⁵; the 3-11 *pik* cycle ¹⁸⁶ also is initiated. The *bak’tun* of the Long Count also “emerges” out of its “watery” depths ¹⁸⁷.

¹⁷⁹ For a full discussion of *k’ojob* see Appendix V of the current work.

¹⁸⁰ Quirigua St. C, east side, (A7-A14).

¹⁸¹ This inference comes from the “Paddler Gods” connection with “bathing” (Stuart et al. 1999b:169-171; Stuart 2011a: 219) and they are often pictured riding cloud scrolls as on Jimbal Stela 1 and Ixlu Stela 1 and 2). In support of this idea, Søren Wichmann (2004b:82-85) Kerry Hull (quoted in Wichmann 2004b) present ethnographic and linguistic evidence from K’iche’ and Ch’orti’ suggesting that this bathing is a “metaphorical expression for the misty state of the world prior to creation.”

¹⁸² The location has a strong association with the North (*xaman*) as is indicated on Kerr vessel K688 where it is the dark locale where the “Baby Jaguar” sits on a zoomorphic stone-serpent-throne (Stuart and Houston 1994:71); the accompanying text reads **NAH-JO’-CHAN “THRONE” XAMAN** for “*nahjo’chan* [throne] north (see Appendix IV in the current study).

¹⁸³ Quirigua Stela C (B15) and the Yax Wayib Mask (D5).

¹⁸⁴ Coba Stela 1 (M14-N14).

¹⁸⁵ Coba Stela 1 (M15).

¹⁸⁶ The presence of the 3-11 PIK cycle is inferred by its calculated base date which is the era date (MacLeod 2008).

¹⁸⁷ Dresden Codex page 61, (B11-A12).

The actions of GI the primordial dawn (Stuart 2005b:166-167; 2011:225) ¹⁸⁸ are highlighted next. From the previous godly council GI emerges bringing light to world as the face of the solar rebirth. He has on his head a “sun bowl” which is the very symbol for east (Stuart 2005b:168). GI is said to “descend from the sky.” Perhaps in this case descent describes the god descending to earth after reaching the noon zenith (Stuart 2011a:226).

Lastly from the *Dresden Codex* there is the mention the *Ik’ Chaak* the Black Rain God ¹⁸⁹. By his color designation, he is associated with the west. His step is also stopped and measured by a marking of his “holy foot” along the celestial road.

The next expected station is midnight/south. At present there are no era day passages that obviously fall into this quadrant. The potential god or event may carry a glyph denoting south (*nojol*) or a signature color of yellow (*k’an*). Then again, the scribes may not have emphasized events from the southern quadrant but rather focused on the three part journey of celestial bodies (east-zenith-west).

Viewing the era day inscriptions as part of a common narrative allows for the comparison of texts from various sites and the search for commonalities as well as differences. These comparisons reveal nuances between texts. For instance, when era passages from Palenque’s Temple of the Cross and Quirigua Stela C are compared side by side one immediately recognizes that the basic syntax of the two passages are parallel—with the date, main event, and mythic locale sharing an identical reading order. This leads to the observation that the Palenque text may be a “shorthand” version of the longer and more descriptive Quirigua Stela C Text (p.c. Peter B  r   2009). The economy and referential nature of the Palenque texts also shows the “bare minimum” of descriptive elements (date-event-object-place) needed to frame the basic components of the era day story.

I must stress again that all of the proposed reconstructions above are purely hypothetical and subject to change as new data comes to light. Due to the lack of available data, there is no way to gauge which one of these versions of the story was preferred— that depended on the initiated scribe who wrote them. Yet this systematic overview of the primary inscriptions concerning the era date will at the very least, provide an organized body of data to compare and contrast era day activities.

¹⁸⁸ Palenque Temple of the Cross (D7-D8).

¹⁸⁹ Dresden Codex page 70 (D1-D5)

Chapter VI

Conclusions

Prior to modern science and the Age of Enlightenment, a major task of myth and religion was not only to convey an understanding of self but also give meaningful order to the world (Assman 2006:35). From this review of Maya era day passages, one sees clearly that the establishment of order at the start of the era stands at the very heart of the cosmogonic act. Order then becomes the sacred foundation on which the era day story rests. The “totality of meaningful order” (Assman 2006:33) is inherent in the godly action of *ts’ak* that describes the sequential order of deities, space, time and ritual actions that were first practiced by the gods and later given to man to maintain. The *ts’ak* event is an order not only related to knowledge of the world, but a cosmic order that arises out of the great mystery of the universe, the *mysterium tremendum* that partly reveals itself through the intricate machinations of the Maya calendar, its divinations and mathematics¹⁹⁰. Perhaps this is why era day gods are not depicted as creators of the order, but rather are shown as the “agents” (Campbell 2001:5) of a pre-established order. These gods are not static beings but dynamic custodians of time and space who tend over every aspect of measurable time at the start of the new era.

In virtually every era day passage this cosmic order and the division of time is somehow reaffirmed. For instance, on the Naranjo Vases K2796 and K7750 the gods like ancient calendar priests assemble in the underworld court of God L. They come bearing tribute caches and a bundled altar that will be set as a foundation stone. The stone commemorates the day and the zero point from which the Long Count will be recorded and take its mark. The Quirigua passages tell how three like-in-kind altar stones were set in a triadic arrangement by four primordial gods. Palenque texts speak of the “descent” of the god of the solar dawn while the *Dresden Codex* passages state repeatedly how time cycles “emerge” out and “enter” into primordial waters. Yet, all this ordering is preceded by chaos and the frenzied disorder wrought by the attack of *Bolon Yokte’* on God N in the nocturnal hours before the first dawn. Time then is composed of “the continuous process of alternation between two opposing conditions: descent and ascent, conflict and resolution, sowing and dawning” (Aveni 1989:246). All of these actions involve a

¹⁹⁰ As Campbell (2001:1-5) keenly notes: *The gods themselves are simply agents of that great high mystery, the secret of which is found in mathematics. This can still be observed in our sciences, in which the mathematics of time and space are regarded as the veil through which the great mystery, the tremendum, shows itself.*

“preoccupation with the onset of time” which is a main characteristic of Mesoamerican religion (López Austin 1993:50).

The high degree to which era day gods, events and sacred locales were shared between texts at different Maya cities argues that a shared mythos, a common nucleus of stories existed, especially during the Late Classic Period and in conjunction with the 9.13.0.0.0 Period Ending celebration. The 13th *k’atun* served as “a numerological reflection of that distant creation” (Stuart 2011a:185) on era day when the 13th *bak’tun* came to a close. Although the degree of uniformity is still an open question, there is little doubt that scribes were quoting from a common story line. The most widely quoted event over a four hundred year period concerns the changing of an altar/pedestal near the edge of the sky at a sacred locale named the New “Three-Stone” Place. The placement of these three stones reflect a three-fold division of space that is similar to a three-tired division of the cosmos that is so basic to Mesoamerican worldview (Stuart 2011a:221-222)

By compiling era day myths into a single work, connections have been made between passages that were previously thought unrelated. For instance, the frenzied disorder wrought by the attack of *Bolon Yokte’* on God N in the nocturnal hours before the first dawn, acts as the prelude to the forthcoming order the gods set in place at the start of the new era. The bundled tribute stone depicted on the Naranjo vases can now be related to the same stone altars that are said to be arranged on Quirigua Stela C. These fragmentary story threads now appear as coherent body and different episodes of a shared narrative describing the various stages of how cosmic order came about (Freidel et al. 1993:67). The events of the day can be hypothetically sequenced along a plot-line that follows the sun’s east-west solar trek through the four cardinal zones. The sun’s path then becomes the ruling order by which era day actions are organized. Also the Sun God is a main protagonist on era day, as is attested on vases K2796 and K7750. Five of the gods assembled represent different aspects of the sun on its “solar walk.” Whether it be the “changing” of the altars, the “descent” of GI from on high, the stone “planting” of *Itzamnaj*, the “bathing” of the “Paddler Gods”, or the “downing” of the “Square-Nosed Beastie”, the action of each god states how another corner of time and space was rendered.

Maya era day myth confronts us with a conceptual world view of cosmic order where all things have a proper time and place. From such ordered foundations, it is easy to see how a myth pertaining to cosmic and godly order could be translated into a codified set of societal values and norms that governed elite conduct. The best evidence for such a

moral code is to look at era day actions themselves and see how each event is replicated in ritual actions by later historical kings. The same stone bindings, stela plantings, and presentations of tribute that occurred at the start of the era are part of the day-to-day actions of kingly governance in a Classic Maya royal court. In fact, every era day action is neither unique nor relegated solely to the past, but is found to be repeated again, and again in historic religious rites which are at their very essence are “myths reenacted” (Campbell 2001:2). A good example is with the repeated primordial act of *ts’ak*. The term is used when a king “orders” his sons within dynastic succession, and when scribes employ the term to “order” passages of texts on a carved tablet (while poetically evoking imagery that reflects eternal cycles found in nature, e.g. night-day, wind-rain etc.). So the act of *ts’ak* represents alignments that occurred at the foundation of time as well as those occurring within historical time. As the Maya replicated these sacral acts they were guaranteeing the survival of their daily societal order that was no doubt based upon a mythic order out of which the era day story arose. Thus era day myth serves one of its sociological functions— that of validating and supporting a “specific moral order of a society” (Campbell 2001:5). When the events of era day are reenacted by historical kings, their movements reflect those of the founding gods who themselves are the pre-established agents of the higher cosmic order. By participating in the myth, the ruler becomes an extension of the supernatural (López Austin 1993:178).

The replication of primordial acts repeating in the human sphere makes perfect sense when one realizes how primordial time is born from myth. Myth itself is a real “cultural force” (Malinowski 1971:13) shaping the internal and external daily life of the individual on all socio-economic levels. Chapter II reviewed the different genres of myth within Maya literature including myth as an incantation and an instrument of healing. Here, a recited myth can act as a divining lens to view the minds of the ancients; so powerful are its words it has the ability to transport the listener back in time and experience the primordial act as it happens. Classic inscriptions record and vividly illustrate rites and religious pageantry and show how myth served to consecrate kingly actions and thereby legitimize ruling power (e.g. Palenque’s Temple 19 Platform). Even numbers used in mathematical calculations were dressed in mythic garb of the gods. Maya rulers embodied time itself; inserting their portraits into the day sign cartouche when inscribing the day name on stone. In fact the pictorial language of myth (its gods, actions, godly regalia, symbols and sacred locales) is so pervasive in Maya art, writing and architecture that one must admit to the profound depth at which myth was entrenched

within daily life of the elite. As a tangible memory of the greater society, myth then continually shaped the Maya view of the world and their place within it.

Studying these mythic passages, one begins to gain a more subtle understanding of the conceptual system and cyclic history that molded Classic Maya ritual and religious thought. By quoting the era day story and linking those events to Period Ending celebrations especially during *k'atun* anniversaries that also occurred on a day 4 *Ajaw*, the Maya were participating in a cosmogonic reproduction of mythic history where primordial time was always connected to present time. The stones that were erected at the start of time are like-in-kind to the stelae erected by historical kings. As Stuart convincingly argues, the commemoration of a 260 day anniversary with another event in the deep past is part of a “patterned history” (Stuart 1995:168) where dates relating to the present are linked to those of the remote past; so that a “text is designed to provide background and context for the particular event being celebrated” (Stuart 1995:167). Yet, I believe that the act evoking a myth as a pretext for history is more than just scribal rhetoric. It points to a core belief that a primordial event is not confined to the past, but it can be activated into the present moment. In the mythic mindset primordial acts (e.g. first sunrise, the first sunset etc.) are replayed in the circular course of time, so that in the past and in the distant future, there is only primordial time with its initial acts being repeated again, and again in the present moment (Van der Leeuw 1958:36). In a sense, the Maya are telling us that “as it happened then, so it happens now.” The order established on era day was a cosmic order to which all human and godly history submitted; one that was dictated by the divine charter embodied in *tz'ak* and the “order” that manifested at foundation of the cosmos.

A study of era day myth offers a glimpse of the *imago mundi* of the ancient Maya and how they pondered the great order and origins of the cosmos. Future inquiry into Maya mythic history holds the challenge and the promise of ever greater discovery, and an even more profound understanding into sacred geometry of creation and the operations of the gods. Many questions remain unanswered. By what law were the gods governed, and how were these laws reflected on era day? How did these divine events shape time and the destiny of man? As we deeply consider these questions, may the pathway to the gods be reopened, and with it, the wonder and wisdom of how myth gave birth the Maya universe.

Appendix I

A List of Era Day Monuments

Monuments

Chichen Itza, The Caracol (Structure 3C15), Panel 1, Right Lateral Face (Q7-R12)
Coba Stela 1, back (M1-P5)
Coba Stela 5 (pA1-pA13)
Coba Stela 28 (A1-C7)
Copan Stela 23 (G7-I2)
Dos Pilas, (Structure L5-49), Panel 18 (A1-B6)
La Corona Altar 4 (Z3-A'1)
Palenque, Temple of the Cross, Main Panel (D3-D8)
Palenque, Temple of the Sun, Main Panel (D16-E3)
Piedras Negras, Altar 1, Fragment B (K1-P2)
Quirigua Stela C, east side (A1-B15)
Quirigua Altar P' (L2-N2) and (Q1-Q2)
Quirigua Zoomorph G (Q5-T2)
"Tila" Stela A (A7-B10)
Tonina Monument 34 (pC-pM)
"Yax Wayib" Mask (A1-F6)
Naranjo, Kerr Vase K2796, Secondary Text (A1-D1)
Naranjo, Kerr Vase K7750, Secondary Text (A1-C12)

Maya Codices

Dresden Codex page 24, Column C (C1-C12)
Dresden Codex page 31 (64), Section a, Column A (A10-A11)
Dresden Codex page 31 (64), Section a, Column B (B10-B11)
Dresden Codex page 43 (76), Section b, Column C (C11)
Dresden Codex page 45 (78), Section a, Column A (A6)
Dresden Codex page 51 (30), Section a, Column A (A2-A3)
Dresden Codex page 52 (31), Section a, Column F (F1-F2)
Dresden Codex page 58 (37), Column E (E17-E18)
Dresden Codex page 60 (39), Section a, Column A-D (A1-D3)
Dresden Codex page 61 (41), Column A-B (A1-B17)

Dresden Codex page 63 (43), Column A (A17-A18)
Dresden Codex page 63 (43), Column B (B17-B18)
Dresden Codex page 63 (43), Column C (C23-C24)
Dresden Codex page 69 (49), Column C-D (C1-D15)
Dresden Codex page 70 (50), Column A (A13-A14)
Dresden Codex page 70 (50), Column A (A23-A24)
Dresden Codex page 70 (50), Column B (B13-B14)
Dresden Codex page 70 (50), Column B (B23-B24)
Dresden Codex page 70 (50), Column C (C1-C5)
Dresden Codex page 70 (50), Column D (D1-D5)

Potential Era Day Passages

Chichen Itza, Caracol (Structure 3C15), Hieroglyphic Band, Fragment 5 (pA1-pB2)
Copan Stela J, west side (p17-p21)
Copan Stela J, west Side (p23-p29)
Kerr Panel 6593 (A2-A5)
Tikal, Burial 116, MT-27 (A1-A2)
Tonina, Mon.150 (A1-B8)
Quirigua Zoomorph P, south text (M3-M2)
Quirigua Stela F, west side (B16)
Dresden Codex page 31 (64), Section a, Column C (C12)
Dresden Codex page 52, Section a, Column E (E1-E2)
Dresden Codex page 62 (42), Column E (E18-E19)
Dresden Codex page 62 (42), Column F (F17-F19)
Madrid Codex, Page 19, Section b (A3)

Potential Unstated Era Dates Connected to Ring Number Calculations

Dresden Codex Page 71, Section a, bottom of Columns F-G
Dresden Codex Page 72 Section a, bottom of Columns A-G
Dresden Codex Page 73, Section a, bottom of Columns A-C
Xultun, Structure 10K-2, east wall, Incised Supplementary Text B

Appendix II

A List of Era Day Events

At present, there are about fifteen recognizable events directly linked to era day. Each event is defined by one or more verbs describing various primordial actions. The roots of these verbs in alphabetical order are: **AT, EM, IL JEL, JOY, JUB, K'AL, HUL, LOK', OCH, PAT, TZ'AK, TZ'AP, TZUTZ** and **WA'**. Included in this line are several enigmatic verbs that still elude decipherment.

The following era day verb list provides the verb location and transliteration along with an illustration. Also it offers a short commentary that addresses various elements of a verb's character and meaning. The majority of these verbs are still the subjects of intensive investigations by Maya epigraphers and linguists. Although a verb's basic meaning may be understood, the finer parts of its morphology and semantic domain are far from clear. Therefore each listing should be considered a working hypothesis based upon current epigraphic, linguistic, and grammatical evidence and are subject to change as new information comes to light. For an in-depth linguistic review of many of the verbs listed see Wald (2007).

1) **AT-to bathe or to partner with? (tr.)**

Location: *Dresden Codex* page 69, Column C (C11) **JO' AT?-li**
 Quirigua Zoomorph G (R6?) **?-CHAN? ?-AT?-wa**
 "Tila" Stela A (A8) **ya-AT?-ji**

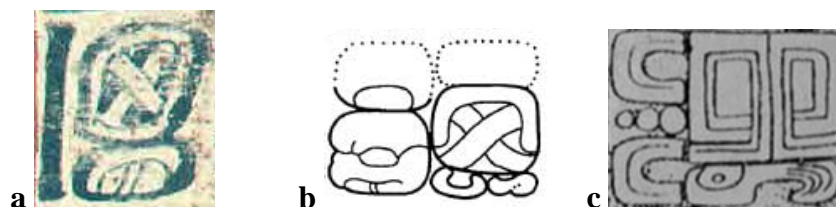


Figure a. *Dresden Codex* page 69, Column C block C11 (photo after Förstemann 1880 courtesy of FAMSI); Figure b. Quirigua Zoomorph G, blocks R6 (drawing by Matthew Looper); Figure c. "Tila" Stela A block A8 (drawing by Hermann Beyer).

Comments: A reading of the verb **AT** remains problematic. Its main sign is the T552 sign, a pair of “crossed bands” within a cartouche (another substitute variant of the sign may be (Macri and Vail 2009) Number ZS1— a figure of a “double-looped rope”). The verb has been previously linked to the act of “bathing” by David Stuart (Stuart et al. 1999b:169-171; 2011:219). In support, Søren Wichmann (2004:82-85) Kerry Hull (quoted in Wichmann 2004) present ethnographic and linguistic evidence from K’iche’ and Ch’orti’ suggesting that this bathing is a “metaphorical expression for the misty state of the world prior to creation” (Wichmann 2004:82-85). Bathing may be mentioned in the *Dresden Codex*, page 69 where “five bathings” refer to actions taken by the five serpents of the Serpent Number Pages. Wald (2007:413-425) offers an in-depth grammatical critique and concludes that the term stands not for “to bathe” but “to partner with.” Whatever the case may be, the ZS1 version of the verb occurs often outside of era day contexts in conjunction with the “Paddler Gods” (aspects of sun/light and night/darkness) who often appear frequently during Period Ending ceremonies (Stuart et al. 1999:169-171; 2011a:219; Søren Wichmann 2004:82-85). A good example of a non-era day context is found on Tonina Monument 110 where the gods preside during the 9.14.10.0.0 half *k’atun* ceremony; the verb employed is similar to that used on “Tila” Stela A (block A8). Therefore, the action refers to a seminal era day event that is repeated during Period Ending ceremonies.

2) **CHUM-** to sit/enthroned (pos.)

Location: “Yax Wayib” Mask (F5) **CHUM-mu-le**



Figure a. “Yax Wayib” Mask block F5 (photo by Carl Callaway)

Comments: The **CHUM** verb normally appears in a historical text in reference to the enthronement of a ruler (Mathews and Schele 1974; Mathews and Justeson 1984:231; and a reading after Berthold Riese, cited in Justeson et al. 1984:349) or the “seating” of a month (e.g. 0 *Pax*; Thompson 1970:119-120). On the “Yax Wayib” Mask the verb appears not in the main text but rather suddenly at the end of the text in what is a lengthy a name phrase of a god/ruler. Perhaps the term is being used in a nominative sense as **CHUM-[e]l** for “seat” indicating that the entity named has been enthroned. Yet, **CHUM-[i]l** for “he sits” is also a distinct possibility. The suffixation with **/-le/** is very strange since there seems to be no derivations with **-el** for positional verbs, but **Chum-il** as the adjectival form “he is sitting” is possible (p.c. Sven Gronemeyer 2011).

3) **EM to descend (intr.)**

Location: Palenque, Temple of the Cross, Main Panel (D7a) **EM ta CHAN-na**

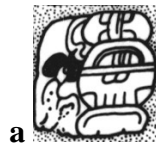


Figure a. Palenque, Temple of the Cross, Main Panel block D7 (drawing by Linda Schele courtesy of David Schele).

Comments: For the morphology of the **EM** verb see Zender (2005) and Sanz González (2006). The “descent” of the god GI from the sky on era day is a fairly new revelation made by David Stuart (2005b:161-170). The action appears clearly on Palenque’s Temple of the Cross but was attributed to a different day by previous scholars. The mix-up occurred since the passage in question is compressed into another text that relates to a future day **13 IK’** that occurs after the era base. Therefore, GI’s descent was previously thought to take place on the latter **13 IK’** date (Freidel et al. 1993:69). GI’s presence on era day corresponds well with the appearance of GI in several

other era day texts (e.g. Kerr Vases K2796 and K7750 and the “Yax Wayib” Mask).

4) **HUL-** to arrive (intr.)

Location: “Yax Wayib” Mask (B4) **HUL-ja-ya**



a

Figure a. “Yax Wayib” Mask block B4 (Photo by Carl Callaway).

Comments: **HUL** is a very common term used to describe the arrival of people or gods such as the Moon goddess in the Supplementary series of a Long Count (Berlin 1968:18; Gaida 1983:65-67; MacLeod 1990b:339-341; Schele, Grube and Fahsen 1992:2-3). The term **HUL** is used on the “Yax Wayib” Mask to refer to the arrival of the Sky God and Earth God who arrive at a “flowery” locale.

5) **IL-** to see/witness (tr.)

Location: Piedras Negras, Altar 1, Fragment B (O1) **yi-IL-ji-ya**
“Tila” Stela A (B9) **?-IL-ji**
The Kerr 6593 Panel (B3) **[yi]IL-la-ji-ya**

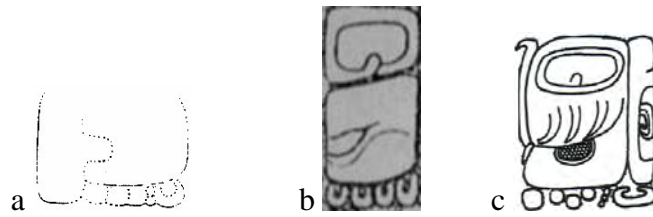


Figure a. Piedras Negras, Altar 1, Fragment B, block O1 (drawing by John Montgomery);
Figure b. “Tila” Stela A, block B9 (drawing by Hermann Beyer); Figure c. K6593 Panel,
block B3 (drawing by Christian Prager).

Comments: In each of these cases **IL** is being used to describe an action made by a historical ruler who is said to “see/witness” the era event from a mythic locale. As MacLeod (2004:294) explains, the verb is transitive in the active perfect status and “conveys the enduring result of the action [and this] enduring result is the glue to that binds political alliances.”

6) **JEL-** to change over/switch (tr.)

Location: Chichen Itza, Caracol, Panel 1, Right Lateral Face (Q8) **JEL-?-li-ya**
Coba Stela 1, back (M18) **JEL-ja**
Copan Stela 23, side “C” (B1) **JEL-li?**
La Corona Altar 4 (A’1) **JEL-?**
Palenque, Temple of the Cross, Main Panel (D6) **JEL-ji-ya**
Palenque, Temple of the Sun, Main Panel (D16) **JEL-ji(T758a)-ya**
Piedras Negras, Altar 1, Fragment B (L2) **u-JEL**
Quirigua Stela C, East side (B6) **JEL-[la]ja**
Quirigua Stela F west side (B16) **JEL-ja**
Quirigua Zoomorph P west text (M3a) **JEL**

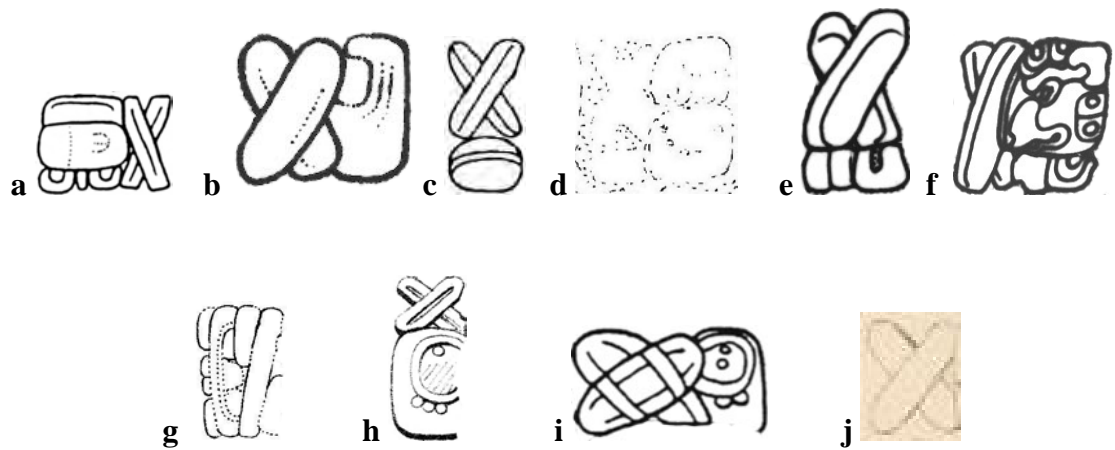


Figure a. Chichen Itza, Caracol, Panel 1, Right Lateral Face, block Q8 (drawing by Alexander Voß); Figure b. Coba Stela 1, back, block M18 (Drawing by Ian Graham); Figure c. Copan Stela 23, side “C”, block B1 (drawing by S. Morley); Figure d. La Corona Altar 4, block A’1 (field drawing by David Stuart); Figure e. Palenque, Temple of the Cross, Main Panel, block D6 (drawing by Linda Schele courtesy of David Schele); Figure f. Palenque, Temple of the Sun, Main Panel, block D16 (drawing by Linda Schele courtesy of David Schele); Figure g. Piedras Negras, Altar 1, Fragment B, block L2 (drawing by John Montgomery); Figure h. Quirigua Stela C, East side, block B6 (drawing by Annie Hunter); Figure i. Quirigua Stela F west side, block B16 Drawing by Matthew Looper); Figure j. Quirigua Zoomorph P west text, block M3a (drawing by Annie Hunter).

Comments: Barbara MacLeod’s (1991) reading for the so-called “cross-planks” logograph (T153) as **JEL** still stands as the best translation of what is perhaps the main era day event. The event was widely quoted over a four hundred year period. In MacLeod’s original assessment she found a substitution pattern at Chichen Itza where the T153 logograph replaced the spelling **ha-l(i)**, leading to an initial reading of **HAL** that then led to a translation of “to make manifest” and in some cases “to change” (MacLeod in Schele 1992:237-238; Freidel et al. 1993:416). MacLeod would later refine her T153 reading to **JEL** for “change” (Freidel and MacLeod 2000); the object of this change was the **k’o[jo]b** or altar/pedestal prior to the closing of the 13th *b’aktun*.

7) **JOY-** to encircle, as in tying a rope around prey, throwing of a lasso or the state of being trapped (tr.)

Location: *Dresden Codex* Page 60, Section a. (the T684 bundle encircling a T736c? “toothache” glyph laying under the foot of the central figure and beside the head of the prostrate deer).



Figure a. *Dresden Codex* Page 60, Section a., the T684 bundle (photo after Förstemann 1880 courtesy of FAMSI).

Comments: As pointed out by Prager (w.c. 2009 in Gronemeyer and MacLeod 2010:31-32) the **JOY** glyph appears at the bottom, center of page 60 of Section a. and is encased by a platform and next to the head of a prostrate deer; the verb’s meaning in the codices is obscure yet it seems to be linked to the snaring of animals with a rope (see Madrid Codex page 91a). Another example involves the tying or wrapping of gods with rope (*Dresden Codex* page 67a) (Gronemeyer and MacLeod 2010:30). In this instance, it may be indicating the state of the deer who stands below the feet of the warring parties like a vanquished captive intended for sacrifice (Prager 2009 w.c. in Gronemeyer and MacLeod 2010:32).

8) **JUB-** to bring down or take down as in to defeat (tr.)

Location: Quirigua Altar P’ (N1a) **u-ju-b’u-li**
Quirigua Altar P’ (M2a) **u-ju-b’u-li**



Figure a. Quirigua Altar P', block N1a (drawing by Matthew Looper) Figure b. Quirigua Altar P', block M2a (drawing by Matthew Looper).

Comments: I suggest an alternative translation to Looper's (Schele and Looper 1996:93; Looper 2003:170, 177) of the word *jubul* as "twisted cord." Based on the term on its connection to the common war verb *jubuy* and to the casting down of one's foe following a conquest. In the context of Altar P', the passage *u jubul* translates as "its downed thing" which in this case is the *Sak* "Square-Nosed-Beastie" *Yax Chan*. So, the term relates to name a conquered foe rather than a twisted cord.

9) JUL?- to pierce (tr.)

Location: Quirigua Altar P' (L2a) **ju-lu?-? K'AK'**



Figure a. Quirigua Altar P', block L2a (photo by Giles Healey courtesy of the University of Pennsylvania Museum of Archeology and Anthropology); Figure b. Quirigua Altar P', block L2a (drawing by Carl Callaway).

Comments: The collocation at block L2a is expressed **ju-lu?-K'AK' mi-?-NAL**. Possibly, the spelling indicates **JUL** for "to spear." Schele and Looper (1996:3) translated this glyphic block as possibly standing for *juli* for "arrived", this is not a possibility for it is now understood that the verb *hul*

is spelled with a soft /h/ and not the hard velar /j/ consonant). The passage may read “spear fire.” The introduction of a fire ritual at the start of the era is an intriguing thought. Such a fire event could also be connected to the cyclic fire rituals found in the context of Maya initial series (Grube 1998). In the case of Alt. P’ it is clear that scribes are paralleling two fire events, one historical and one mythical with the former located on Altar P’ (I2) during the *jo’tun* Period Ending scattering ritual and the latter at block L2a concerning the era date.

10) **KAB-** to do, as to preside over, govern or tend over (tr.)

Location: Quirigua Stela C, East side (A15) **u-KAB-ya**
 Quirigua Altar P’ (N2a) **u-KAB-ya**
 Quirigua Altar P’ (Q1) **u?-KAB-?**
 “Yax Wayib” Mask (C2) **u-KAB-ji**
 “Yax Wayib” Mask (D6) **u-KAB-ji**
 Tonina, Mon.150 (A1-B8) **u-KAB-ji-ya**

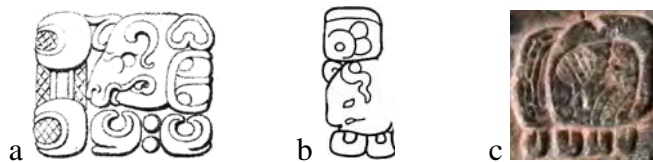


Figure a. Quirigua Stela C, East side, block A15 (drawing by Annie Hunter); Figure b. Quirigua Altar P’, block N2a (drawing by Matthew Looper); Figure c. “Yax Wayib” Mask, block C2 (photo by Carl Callaway).

Comments: The **kab-ij** collocation is used extensively in historical texts to name the individual who presides over or supervises a particular action (Grube 1990:326). In all the cases quoted above, the term refers to the god or historical figure who oversees the era day event. For instance On Quirigua Stela C, it is the god(s) known as the **WAK CHAN AJAW** who presides over the placement of the three stone altar/throans.

11) **K'AL-** to bind, wrap, tie, close (tr.)

Location: Chichen Itza, Caracol, Panel 1, right face (Q9) **K'AL-li?/ji?-ya**
Quirigua Stela C, East side (A7) **3 K'AL-ja TUN**
Quirigua Stela C, East side (A12) **i-u-ti-ya K'AL TUN-ni**

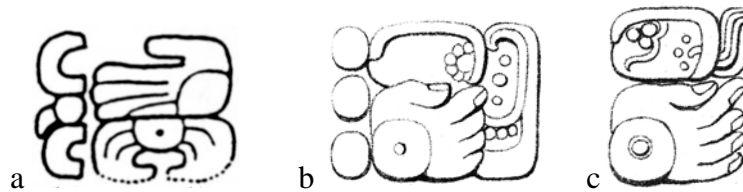


Figure a. Chichen Itza, Caracol, Panel 1, right face, block Q9 (drawing by Alexander Voß); Figure b. Quirigua Stela C, East side, block A7 (drawing by Annie Hunter); Figure c. Quirigua Stela C, East side, block A12 (drawing by Annie Hunter).

Comments: The term **K'AL** can refer to the “binding” (Stuart 1996:154-158) of time periods as it does on the Caracol Panel 1 where the 3-11 *pik* cycle and the 17th *tun* period are bound together in conjunction with the era day event. On Quirigua Stela C the items “bound” are the three altar/stones and may refer not only to their placement but also to their physical wrapping prior to installation (see the central carving on the Copan Peccary Skull for just such a wrapped stela, Figure IV.15c). The common act of wrapping stone altars prior to their dedication on Period Endings and on era day may relate to modern “ethnographic accounts [that] speak of a dangerous, liminal period during which time newly-fashioned sacred objects are extremely acceptable to soul-loss. Such objects are typically wrapped in cloth to protect them until they are stronger . . .” (Stone and Zender 2011:81). The expression **K'ALAK K'IN** or “closing of days” is defined in the *Cordemex* (Barrera Vásquez 1980:369) as *creación del mundo*; here, the closing of the days corresponds to the creation of the world when there occurs the “conclusion of the establishment of one or all of the time cycles” (López Austin 1993:47).

12) LOK'- to emerge/come out (intr.)

Location: *Dresden Codex* page 61, Column B (B11) **u-LOK'**



Figure a. *Dresden Codex* page 61, Column B, block B11 (photo after Förstemann 1880 courtesy of FAMSI).

Comments: The entity “emerging” (*janak*) on Dresden, page 61 is said to be the *bak'tun* period that is immediately followed by a series of numerical sums that “enter” into the primordial waters (see comments on the verb **OCH**).

13) OCH- to enter (intr.)

Location: *Dresden Codex* page 61, Column B (B12) **OCH ti HA'**
Dresden Codex page 61, Column A (A13) **HUN OCH PIKTUN**
Dresden Codex page 69, Column A (C12) **HUN OCH PIKTUN**
Dresden Codex page 69, Column B (D12) **OX OCH WINIK-ki**
Dresden Codex page 69, Column A (C13) **HUN OCH K'IN-ni**



Figure a. *Dresden Codex* page 61, Column B, block B12; Figure b. *Dresden Codex* page 61, Column A, block A13; Figure c. *Dresden Codex* page 69, Column A, block A12; Figure d. *Dresden Codex* page 69, Column B, block B12; Figure e. *Dresden Codex* page 69, Column A, block A13 (all photos after Förstemann 1880 courtesy of FAMSI).

Comments: The term **OCH** is being used in the Serpent Number Pages of the *Dresden Codex* as introducing a series of a mystical and magical counts that

seemingly rise out of the murky depths of primordial time. The phrase *och ti ha'* (*Dresden Codex* page 61, Column B, block B12) indicates that numbers rise out and enter into watery depths. As Barbara MacLeod (p.c. 2008) noted, such poetic imagery describing arithmetic functions gives the impression that scribes may have envisioned addition and subtraction within a Long Count as acts of submersion and emergence.

14) **PAT-** to form/make (tr.)

Location: *Dresden Codex* page 61, Column A & B (A3, A8, B13) **PAT-ja**
Dresden Codex page 69, Column C & D (C3, C8, D13) **PAT-ja**

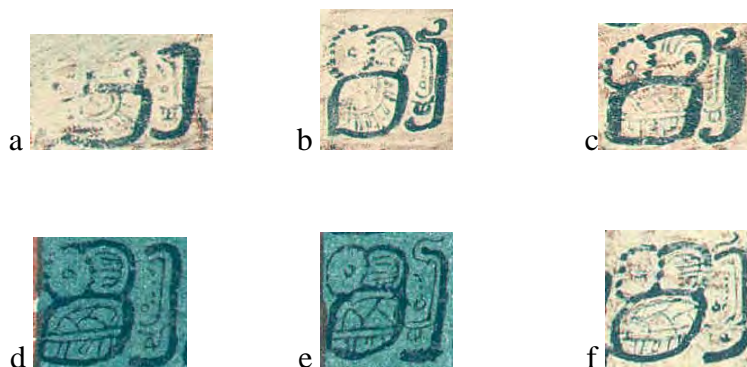


Figure a. *Dresden Codex* page 61, Column A, block A3; Figure b. *Dresden Codex* page 61, Column A, block A8; Figure c. *Dresden Codex* page 61, Column B, block B13; Figure d. *Dresden Codex* page 69, Column C, block C3; Figure e *Dresden Codex* page 69, Column C8; Figure f. *Dresden Codex* page 69, Column D, block D13 (all photos after Förstemann 1880 courtesy of FAMSI).

Comments

PAT in the inscriptions is commonly used in connection to the making of temples and houses (Stuart et al. 1998). In a modern context, the term refers to the making objects like dough, wax and clay (Ciudad Real 2001:482). In the *Dresden Codex* pages (Grofe 2007:60,129; Callaway 2009) the term refers to the making of custodial gods beside time periods, as in the case of the creation of the number twenty that occurs shortly before the era date (*Dresden Codex*, page 61, blocks A8-B8).

15) **TZ'AK-** to put in order (tr.)

Location: Naranjo, Kerr Vase 2796, Secondary Text (A2) **TZ'AK-ja-ya**
Kerr Vase K7750, Secondary Text (A2) **TZ'AK?-ja-ya**



Figure a. Naranjo, Kerr Vase 2796, Secondary Text, block A2; Figure b. Kerr Vase K7750, Secondary Text, block A2 (all Photographs © Justin Kerr K2796 and K7750).

Comments: The word **TZ'AK** itself is imbued with multiple meanings not the least of which are “to order, to order by stacking, to count and to cure” in the modern Maya lexicon (Barrera Vásquez 1980:871-72). The general meaning across Maya languages of the word is to “order” and it pertains to a specific type of ordering related to the position of objects that follow one another in an uninterrupted sequence, such as a line of bricks or stack of tortillas. This is no haphazard arrangement but one that indicates a type of order that is inherently sequential, like the links in a chain or even the bones in a human arm (Wald 2007:139-147); for this reason, **TZ'AK** can even describe the setting and curing of two broken bones. The *Cordemex Dictionary* (Barrera Vásquez 1980:871-72) also lists **TZ'AK** as: “*para siempre, cosa sin fin*” or “for always, a thing without end” as in “*hay trabajos sin fin del mundo*” or “there are works without worldly end” (p.c. Barbara MacLeod 2004). From these few definitions, we see that as a whole, **TZ'AK** also embodies an idea of eternal and meaningful order.

16) **TZ'AP-** to plant/erect upright (pos.)

Location: Quirigua Stela C, East side (B7) **u-TZ'AP-wa**
Quirigua Stela C, East side (A10) **u-TZ'AP-wa**



Figure a. Quirigua Stela C, East side, block B7; Figure b. Quirigua Stela C, East side, block A10 (drawings by Annie Hunter).

Comments: **TZ'AP** is normally reserved for describing the erection of stela and how the monument is “planted” (Grube 1990) into the ground. In the case of Quirigua stela C, the term denotes the erection of the first two altars/stones at the yax “*three-stone*” *nal* place located at the sky’s edge.

17) **TZUTZ-** to finish/end/terminate (tr.)

Location: Coba Stela 1, back (M19) **TZUTZ**
 Copan Stela 23, side “A” (B8) **TZUTZ-ya**
 Dos Pilas Panel 18 (A2) **TZUTZ-yi**
 Palenque Temple of the Cross, Main Panel (D4) **TZUTZ-yi**
 Piedras Negras, Altar 1, Fragment B (K2a) **TZUTZ-yi**
 Quirigua Stela C, East side (B14a) **TZUTZ-ya**
 Quirigua Altar P’ (K3) **TZUTZ-wa?**

Possible Occurrences: Copan Stela J West
 (block 15b and 20a) **TUTZ-ji-ya/TUTZ-yi-ya**
 Tonina, Mon.150 (A2) **TZUTZ-yi-ya**
 Tonina, Mon.150 (A4) **TZUTZ-yi**

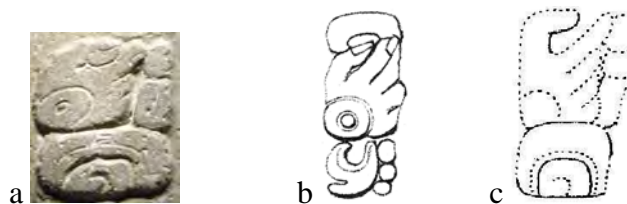


Figure a. Palenque Temple of the Cross, Main Panel (D4) (photo by Carl Callaway); Figure b. Quirigua Stela C, East side, block B14a (drawing by Annie Hunter); Figure c. Piedras Negras, Altar 1, Fragment B, block K2a (drawing by John Montgomery).

Comments: This well-known T218 **TZUTZ** logogram was first deciphered by David Stuart (2001:11). The sign is a portrait of the left hand holding a pin-like “bauble” with a tassel attached. The **TZUTZ** glyph is commonly used to signify the close or termination of a Period Ending like that involving the 13th *bak’tun*.

18) **UHT- to happen/occur (intr.)**

Location: La Corona Altar 4 (Y3?)
 Naranjo Kerr Vase K7750, Secondary Text (C10) **u-ti-ya?**
 Piedras Negras, Altar 1, Fragment B (M2) **u-ti-ya**
 Piedras Negras, Altar 1, Fragment B (P2) **u-ti-ya**
 Quirigua Stela C, East side (A9) **u-ti-ya**
 Quirigua Stela C, East side (A11) **u-ti-ya**
 Quirigua Stela C, East side (A12) **i-u-ti-ya**
 Quirigua Stela C, East side (B13) **u-ti-ya**
 Quirigua Zoomorph G (Q6) **u?-ti-ya**
 “Yax Wayib” Mask (C5) **u-ti**
 “Tila” Stela A (B6) **u-ti-ya**
 Tonina, Mon.150 (A8?) **u-ti?**
 K6593 Panel (A2) **i-u-ti**

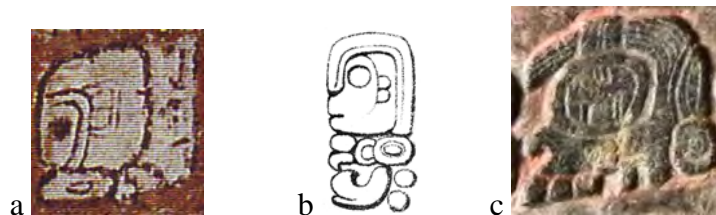


Figure a. Naranjo Kerr Vase K7750, Secondary Text, block C10 (Photograph © Justin Kerr K7750); Figure b. Quirigua Stela C east side, block A11 (drawing by Annie Hunter); Figure “Yax Wayib” Mask, block C5 (photo by Carl Callaway).

Comments: The **UHT** verb deciphered by Stuart (1990) is one of the most wide-spread verbs in the Maya corpus and is used to indicate the particular day or place where an event happened.

19) **WA’ –to stop erect after walking some distance (pos.)**

Location: *Dresden Codex* page 70, Column C (C3) **WA’-la-ja**
Dresden Codex page 70, Column D (D3) **WA’-la-ja**
Dresden Codex page 24, Column C (omitted but implied)

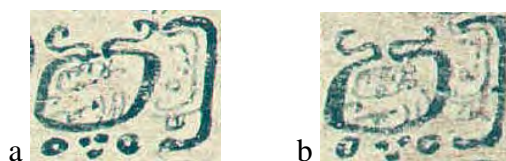


Figure a. *Dresden Codex* page 70, Column C, block C3; Figure b. *Dresden Codex* page 70, Column D, block D3 (all photos after Förstemann 1880 courtesy of FAMSI).

Comments: The verb **WA’** was first interpreted as “erect” by Riese (1990:355) and later deciphered by Schele and Grube (1997:216). The event in both passages of the *Dresden Codex* reads “*wa’laj k’uh ok*” “stopped holy foot” and is followed by the names of the protagonists. On *Dresden Codex* page 24, Column C only the “*k’uh ok*” is offered at block C3. The verb **WA’** is used frequently for the 819 day Count verb in recording its various stations. Barbara MacLeod (p.c. 2007) more recently the verb as “stood

still erect, in the midst of walking.” Modern Yucatec glosses the word *wa’be* as “*partirse del lugar, comenzar la jornada*” (Barrera Vásquez 1980:905) and *wa’lkinbil* as “*va parar, poner en pie*” (Barrera Vásquez 1980:910). Tentatively then, the verb translates as stopping, while standing, after having traveled some distance. It was important for the scribe to signify that it is the foot or step of the god that stops. The era date on which the god’s foot is firmly planted serves as a new starting point for the subsequent distant numbers that follow below.

Enigmatic Era Day Events

20) **YAL?**- to throw (tr.)

Location: Dos Pilas Panel 18 (A4) **YAL-la?**



Figure a. Dos Pilas Panel 18, block A4 (drawing by David Stuart).

Comments: The Panel 18 glyph at A4 is thought to denote a relationship, the “child of mother” glyph (Houston 1993:101). A parentage statement to a god is atypical in this instance, and to date, it is rare to find such texts denoting relationships between gods. Parentage statements of historical rulers do occur in conjunction with era day texts, but they are normally placed at the very end of a passage and well after the mythic events are stated (see the “Yax Wayib” Mask inscription). A likely alternative at A4 is the verb **YAL** that indicates that something is thrown (p.c. Jeff Buechler 2007). Gods throwing gods is a common event in mythic stories (e.g. the throwing of the “Baby Jaguar” into a mountain cave by the Death God—see Kerr Vase K521 as well a reference on Palenque’s Temple of the

inscriptions West Panel, to the God GI casting the “heart of the Maize-Death God” into the ocean (see Guenter 2007:51).

21) JANAK?/WINAK/WINIK?

Location: *Dresden Codex* page 61, Column A (A11) **ja-na-ki**



Figure a. *Dresden Codex* page 61 Column A, block A11 (photo after Förstemann 1880 courtesy of FAMSI).

Comments: The spelling of this collocation has two possibilities **ja-na-ki** or **WINAK na-ki**. The initial “lunar” sign T682b may in this case hold a syllabic value of /**ja**/ or a logographic value of **WINAK/WINIK** for a numerical value of 20 (p.c. Erik Boot 2010). I currently favor a reading of **JANAK** (p.c. Barbara Macleod 2008) defined by the Cordemex as ‘unencumbered’ (Barrera Vásquez 1980:177); the thing unencumbered is the emerging *bak’tun* cycle. Other instances of the term are found on Dresden Page 70 (C15), 73a (D3), 31a (D3) and precedes the **LOK** verb; alternatively it may refer to the moon (Grofe 2007:132, Figure 4.10).

22) **?-HAAB'?**

Location Quirigua Altar P' (K4d) **?-HAAB'?**

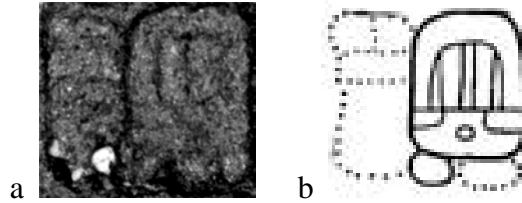


Figure a. Quirigua Altar P', block K2d (photo by Giles Healey courtesy of the University of Pennsylvania Museum of Archeology and Anthropology); Figure b. Quirigua Altar P', block K2d (drawing by Matthew Looper).

Comments: The standard phrase “finished 13 *pik*” immediately precedes block K4. One expects a verb to follow. But instead, there is what may be a *haab* sign prefixed by a possible number 7/13-? Matthew Looper drew the latter part of the block as the T548 **HAAB** logogram; taken together the entire block may read **7/13-? HAAB?** This collocation may be expressing some sort of temporal reference about time and the structure of the Long Count, perhaps similar in nature to *ti' haab* expressions found elsewhere denoting that the “edge of the month” is reached or the its beginning (see Ek' Balam, Structure 1, Capstone 14, (A3) for a **TI' HAAB** expression).

23) **BO'J?- to carve? (tr.)**

Location: “Yax Wayib” Mask (F3) **b'o?-ja**



Figure a. “Yax Wayib” Mask, block F3 (photo by Carl Callaway).

Comments: The event refers to the carving of the “image” or mask on which the inscription is carved. The verb **BO’J** is rare in the script but does occur in the inscriptions of Northern Yucatan, especially at Xcalumk’in (see Lintel 1b, block C1; p.c. Peter B  r   2008).

24) **?-?-chi-la?**

Location: Tonina Monument 34 (pD) **?-?-chi-la?**

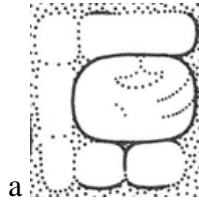


Figure a. Tonina Monument 34, block pD (drawing by David Stuart).

Comments: Glyph block pD from monument 34 comes occurs after the recording of the **8 KUMK’U** month day and name, therefore it very likely holds an event describing era day activities. With the main sign of **/-chi-/** may read **YICHNAL** for “in the company of” and refers to the gods or persons who accompany the action.

25) **“WINIK’-KNOT”?**

Location: “Yax Wayib” Mask (B1) **“WINIK-KNOT”-ya**



Figure a. “Yax Wayib” Mask, block B1 (photo by Carl Callaway); Figure b. “Yax Wayib” Mask, block B1 (drawing by Carl Callaway).

Comments: This event consists of a “knot bundle” infixed with an Early Classic T522 **WINIK** logograph, the entire collocation carries a **/-ya/** suffix. It serves as the initial event on the “Yax Wayib” Mask involving the god GI of the primordial dawn. Michael Grofe (p.c 2011) points out that a parallel version of this verb may occur on Quirigua Stela E, east, block B6 in conjunction with a **CHAN-na** sign and prior to a Lunar Series. If so, the event is also in conjunction with the famous 9.17.0.0.0 13 *Ajaw* 18 *Kumk’u* eclipse date (Kelley 1977). Therefore, Logic dictates that the event might in some way relate to the sun’s journey.

26) “PALANQUIN”-ja

Location: La Corona Altar 4 (B’4)

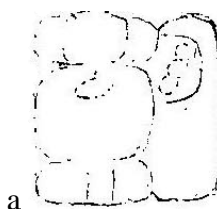


Figure a. La Corona Altar 4, block B’4 (drawing by David Stuart).

Comments: The era passage on La Corona Altar 4 may continue to include blocks B’1 through F’4 where at B’4 there is another possible reference to a Palanquin event inflected with a **/-ja/** suffix (p.c. peter Bíró 2008).

27) BOLON “EK’ KAB”- a reference to war?

Location: Naranjo, Kerr Vase K2796 (glyph collocation painted on bundles)
Kerr Vase K7750 (glyph collocation painted on bundles)

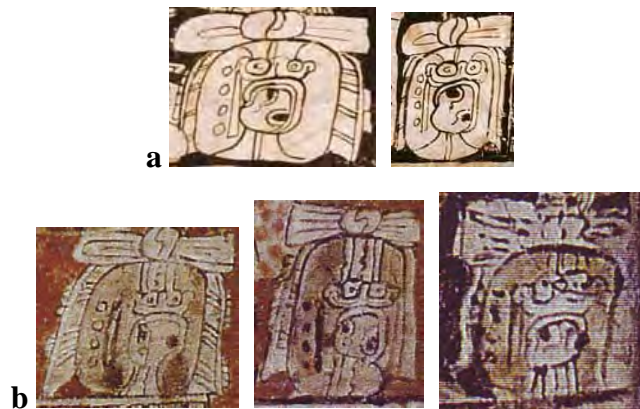


Figure a. Bundles from K2796; Figure b. Bundles from K7750 (all Photographs © Justin Kerr K2796 and K7750).

Comments: In each respective scene on K2796 and K7750, gods seated before God L present a tribute bundles marked with a glyphic collocation reading **BOLON EK’ KAB**. The Glyph **EK’ KAB** or “star-over-earth” logograph (without the numerical coefficient) is a representation of a star floating over an earth sign and has no secure reading but it is directly associated with acts of warfare (Aldana 2005). The collocation appears in the script usually with droplets or “water stacks” issuing down from the left and right arm ends of the star sign. These water stacks are absent on the bundles from the vases.

28) Unknown Event

Location: Coba Stela 28, front (C3)

Comments: Block C3 of Stela 28 comes within a “Grand Long Count” after the recording of the **8 KUMK’U** month day and name, therefore it very likely

holds an event describing the era day. Unfortunately the glyph, block is almost completely effaced so reading can be offered.

29) **?-ja**

Location: *Dresden Codex* page 60, Section a, Column A (A2) **?-ja**



Figure a *Dresden Codex* page 60, Section a, Column A, block A2 (photo after Förstemann 1880 courtesy of FAMSI).

Comments: Unfortunately this verb is completely effaced from the page yet it very likely relates to the violent clash occurring between God N and the *Bolon Yokte'* who are named directly following the event and are who are represented in accompanying scene engaging in a battle.

Possible Era Day Events

30) **PAS- to dawn (tr.)**

Location: Chichen Itza Caracol, Hieroglyphic Band, Fragment 5 (A1) **u-PAS**



Figure a. Chichen Itza Caracol, Hieroglyphic Band, Fragment 5, block A1 (drawing by Carl Callaway)

Comments: If the above fragment relates to the era base (the associated gods and locales suggest it may) then **PAS** is describing the first dawn. Things that appeared in conjunction with the dawn were perhaps the **16 YOK'IN** God at the **OX WITZ WAK CHAN** place.

31) **ya-?-T1078/“FLINT-FACE”-la-?**

Location: Copan Stela J, west (p18 and p24)

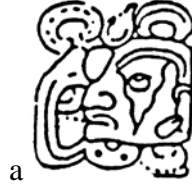


Figure a. Copan Stela J west, block P24 (drawing by Linda Schele).

Comments: This collocation may be similar to the or the **“Split-Earth”-laj** glyph we see in the inscriptions related to flowering jade trees mentioned on Palenque’s Temple of the Inscriptions mid Panel (Callaway 2006: 62-63). If the **ya-T1078/“Flint-Face”-la-ya** is a verb, the verbal suffixing here is not clear and needs further study. The event takes place in association with the appearance of the god G1.

32) **AK'OT- to dance (intr.)**

Location: La Corona H.S. 3, Block I/Block A (D3)

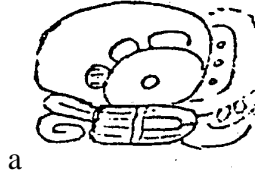


Figure a. La Corona H.S. 3, Block I, block D3 (drawing by Ian Graham).

Comments: This action of dance may be connected to the day [9.12.8.13.0] 4 *Ajaw* 8 *Kumk'u*. Although a historical date, it is possible that the mythical *gravitas* of the day was recognized and scribes sought to parallel a primordial act that took place on era day. At present there is no era day text indicating dance, although there are numerous images of dancing gods within Maya iconography, especially the Maize God (see K633, K1271, K1837). The north face of Stela C displays the *Te'* God (an aspect of a primordial tree) in the state of dance (Looper 2003:166 after p.c. Paul Johnson) and could be a reflection of a primordial act that featured dance.

Appendix III

A List of Era Day Gods

The following list a reference guide to the era day gods and to the monuments on which they occur. A short commentary on each god is given along with its “activity profile” that tries to ascertain the identity of the god and its particular duties. The commentaries are by no means a final word on the nature of each god and are only meant to serve as referential descriptions. Their profiles will no doubt change and expand in the coming years with each new investigation as their activities are mapped across Maya myth, ritual and art. For an in-depth look at several of the gods mentioned see the works of Schelhaus (1910) and Taube (1992).

1) God D ITZAMNAJ

Location: Quirigua Stela C, east side (B12)

 “Yax Wayib” Mask (C4-D4)

 Portrait on Madrid Codex, Page 19 Section b

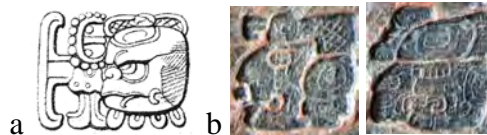


Figure a. Quirigua Stela C, east side, block B12 (drawing by Annie Hunter); Figure b. “Yax Wayib” Mask, blocks C4-D4 (photos by Carl Callaway).

Comments: On Quirigua Stela C East, God D is the one who “binds” a stone at a place called the “Water Throne Stone.” This is the third stone to be set in place according to the Stela C text. The event happens at the New “Three-Stone”-Place shortly before the closing of the 13th *bak’tun*. On the “Yax Wayib” Mask God D is said to “oversee” several era day events that include the arrival of various gods. God D is cast as an authoritative figure and his high rank is in keeping with other mythic texts outside of era day myth, like those on Palenque’s Temple XIX Panel where he oversees and installs GI into kingship (Stuart 2005b).

2) God B CHAAK

Location: *Dresden Codex* page 60 (39), Section A, Column A-D (B3)

Dresden Codex page 70 (50), Column D (D5)

“Yax Wayib” Mask (A4)

Portrait on Madrid Codex, Page 19 Section b

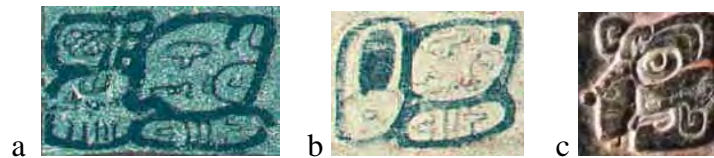


Figure a. *Dresden Codex* page 60 (39), Section A, Column, block B3 (photo after Förstemann 1880 courtesy of FAMSI); Figure b. *Dresden Codex* page 70, Column D, block D5 (photo after Förstemann 1880 courtesy of FAMSI); Figure c. “Yax Wayib” Mask, block A4 (photo by Carl Callaway).

Comments: Page 70 of the *Dresden Codex* notes that *Ihk' Chaak's* (the black western *Chaak*) holy foot was “stopped” and thus his position marked. *Chaak's* name also occurs as part of GI's name phrase on the “Yax Wayib” Mask. The portrait rendered on the mask front is of the god GI wearing a *Chaak* headdress and these features parallel what is written in the text naming the god as *GI Yax Wayib Chaak*. Page 60 of the Dresden gives *Chaak* in an extended title of *?-tu-ba Chaak-ki Bolon Yokte'* as the agent who oversees an action (most likely of destruction); therefore *Chaak* in this case may just be part of an extended appellative for the *Bolon Yokte'*.

3) God E The “Tonsured” Maize God

Location: *Dresden Codex* page 24, Column C (C10)

Dresden Codex page 61 (41), Column B (B6)

“Yax Wayib” Mask (E6-F6)?



Figure a. *Dresden Codex* page 24, Column C, block C10 (photo after Förstemann 1880 courtesy of FAMSI); Figure b. *Dresden Codex* page 61 (41), Column B, block B6 (photo after Förstemann 1880 courtesy of FAMSI); Figure c. “Yax Wayib” Mask, block E6-F6 (photo by Carl Callaway).

Comments: All these Maize God appearances are problematic in some way. God E is not featured as a main protagonist in era day texts. On page 24 of the *Dresden Codex* he is one of the secondary gods who carries the T172 prefix, that tentatively reads **YAH**, meaning a condition of being wounded or damaged (Macri et al. 2009:212). Yet the reading of T172 is far from certain so the state of the deity can not be indicated with any assurance. A good guess is that the wounding may refer to a spearing by the “Venus” God (see comments for God K). A head variant of God E (used to spell *Ajan*?) on the “Yax Wayib” Mask is also difficult to assess since it occurs at the very end of the text in a lengthy name phrase (E6) describing the “image” of the mask patron. Lastly, The Maize God on Kerr Vase K8009 is named the *Wak Chan Winik* (Freidel et al. 1993:244) leading to the possible identification of the god with this title; therefore the Maize god may be one of the *Wak Chan Ajaw* deities who oversees era day events.

4) God K **CHAK EK’ K’AWIIL**

Location: *Dresden Codex* page 24, Column C (C7-C8)



Figure a. *Dresden Codex* page 24, Column C, blocks C7-C8 (photo after Förstemann 1880 courtesy of FAMSI).

Comments: On page 24 of the *Dresden Codex* *K'awiil* is one of the secondary gods who carries the T172 prefix, that tentatively reads *yah*, meaning a “wounded or damaged” condition (Schele and Grube 1997:143; Macri et al. 2009:212) This glyph has no proven phonetic reading and therefore is far from certain, so the state of the deity can not be indicated with any real assurance. Yet, in the pages of the Venus Tables (pages 25-29), the gods who are listed on page 24, Column C as “wounded” are pictured riddled with spear-thrower darts cast by five “spearer” gods (Schele and Grube 1997:143) who are possibly the avatars of the Venus (Aveni 1989:228). *K'awiil* is pictured in the *Dresden Codex* on page 25, Section c, and appears fallen and speared with darts (Schele and Grube 1997:143).

5) God L **IHK' [Yak'ab] TAHN**

Location: Naranjo, Kerr Vase 2796, Secondary Text (B2-A1)
 Naranjo, Kerr Vase 7750, Secondary Text (B2-A1)
Dresden Codex page 24, Column C (C4)
 Portrait Kerr on Vase 2796 and Kerr Vase 7750



Figure a. Kerr Vase 2796, block B2; Figure b. Kerr Vase 7750, block B2; Figure c. Kerr Vase 2796 portrait; Figure d. Kerr vase 7750 portrait (Photographs a—d © Justin Kerr K2796 and K7750); Figure e. *Dresden Codex* page 24, block C4 (photo after Förstemann 1880 courtesy of FAMSI).

Comments: Zender and Guenter (2003:107) recently offered a reading of God L's name as *Ihk' [Yak'ab] Tahn* for “Black His Dark Heart.” Prominently sitting on his Jaguar throne within a mountain adobe, this Merchant God of the Underworld receives a council of gods bearing tribute. He dons a feathery hat that holds his companion owl and he is smoking a large cigar. Prominent facial characteristics include a sunken, toothless jowl with jaguar spots and a jaguar ear. Possessing the throne, he appears to be the

highest ranking dignitary while the gods before him display hand and arm gestures of subordination. Yet, according to the vase secondary text, it is not God L who directs the organization of the group. Instead each god's respective position is simply said to be "ordered." Page 24 of the *Dresden Codex* records the position of God L's "holy foot" within the celestial sphere

6) God N **ITZMAM K'AN AHK**

Location: *Dresden Codex* page 60, Section A, Column (B2)
Dresden Codex page 61 (A5-B5), page 69 (C5-D5)
 Portrait *Dresden Codex* page 60 Section A
 Madrid Codex, Page 19 Section a, Column 1 (A9)



Figure a. *Dresden Codex* page 60, Section A, block B2 (photo after Förstemann 1880 courtesy of FAMSI); Figure b. Portrait *Dresden Codex* page 60 Section A (photos after Förstemann 1880 courtesy of FAMSI).

Comments: A new reading for God N's name is **ITZMAM K'AN AHK** (p.c. Erik Boot 2010). God N is depicted on *Dresden Codex* page 60 clashing with the *Bolon Yokte'*; his forehead streams with blood indicating the a bashing from the confrontation. The stated event on page 60 is unfortunately eroded but if God N's role as a sky-bearer *Bakab* is any clue, his harm threatens sky-earth stability. Another role God N plays is in the organization of the count of *k'atuns* (see Chapter III.37) and for this reason like-in-kind *bakabs* accompany the renewal of time periods shortly before the start of the era on Dresden pages 60 and 69.

7) Goddess O CHAK CHEL

Location: Coba Stela 1, back (M15-M17)

Dresden Codex page 70 (50), Column C (C5)

“Yax Wayib” Mask (F6)?

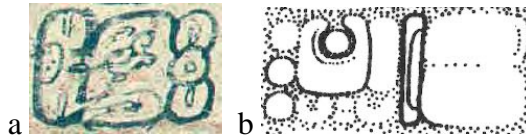


Figure a. *Dresden Codex* page 70, Column C, block C5 (photo after Förstemann 1880 courtesy of FAMSI); Figure b. Coba Stela 1, west side, blocks M15-N15 (drawing by Ian Graham).

Comments: The Moon Goddess appears on *Dresden Codex* page 70 as one whose “holy foot” is “stopped” and position charted. She is also present on era day within Lunar Series as a 23 day old moon on Coba Stela 1, west side (block M15). According to Grofe (2007:136) on August 13, 3114 BC the actual moon was one day prior to being exactly full and it appeared “close to the sidereal position of the second solar nadir (14.8 degrees North).” She may also appear in the theonym of the Maize God on the “Yax Wayib” Mask.

8) AJ WINIK “God of Twenty”

Location: *Dresden Codex* page 60 (39), Section A (C2)

Dresden Codex page 61 (41), Column B (B8) and (B16)

Dresden Codex page 69 (49), Column D (D8)



Figure a. *Dresden Codex* page 61, Column B, block B8 (photo after Förstemann 1880 courtesy of FAMSI).

Comments: The **AJ WINIK** is a pre-era day god who appears just 20 days prior to the start of the era on page 61 and 69 of the Dresden (Callaway 2009). He is involved with calculations of sums that are used in computing the Serpent Number tables. A portrait of the “God of Twenty” is elusive. One possibility is that his portrait is equivalent to the **AJAW** glyph (the face of the god *Jun Ajaw*; see Stone and Zender 2011:37), the 20th day name in the *tzolk’in*. He is well attested as an anthropomorphic being in the colonial manuscript of the Chilam Balam of Chumayel (Roys 1967:116-119) and is described in the text as fully erect biped, walking a celestial east-west path. His human qualities are reflected by his name **WINIK** which is the general term for a human being (Barrera Vásquez 1980:923) who possesses a count of twenty fingers and toes.

9) **AJ MIH K’IN** “God of Zero”

Dresden Codex page 61 (41), Column B (B9)

Dresden Codex page 69 (49), Column D (D9)



Figure a. *Dresden Codex* page 61 (41), Column B, block B9 (photo after Förstemann 1880 courtesy of FAMSI).; Figure b. *Dresden Codex* page 69, Column D, block D9 (photo after Förstemann 1880 courtesy of FAMSI); Figure c. Yaxchilan Lintel 48, block B2 (drawing by Ian Graham).

Comments: The **AJ MIH K’IN** is another pre-era day God who appears just 20 days prior to the start of the era on page 61 and 69 of the Dresden. There is good evidence to suggest that he represents the numeral zero (Callaway 2009). The title *Aj Mih K’in* literally translates as “He No Day” and in the *Dresden Codex* (page 61, block A8-B8) the title substitutes as the number 0 in a Distance Number counting from 19 to 0. On Dresden page 69 the

scribe replaces the **AJ MIH K'IN** collocation with the “darkened spider monkey” head (Grofe: 2007:64) leading to a possible connection that the god may be a manifestation of the “night spider monkey scribe” as seen on Yaxchilan Lintel 48, block B2.

10) **GI**

Location: Palenque, Temple of the Cross, Main Panel (C8-D8)

“Yax Wayib” Mask (A3-A4)

Copan Stela J, west side (block p25)?

Portraits found on K2796 and K7750 and front side of “Yax Wayib” Mask



Figure a. Palenque, Temple of the Cross, Main Panel, blocks C8-D8 (photo by Carl Callaway); Figure b. Portrait found on K2796 (Photograph © Justin Kerr K2796); Figure c. Portrait Found on K7750 (Photograph © Justin Kerr K7750).

Comments: Stuart (2005b:167-170; 2001:225) convincingly argues that GI is an aspect of the primordial dawn who wears on his head the “quadripartite badge” with its central element (a bowl infixed with a sun sign) representing the cardinal sign for east. Palenque’s Temple of the Cross main panel records GI as “descending from the sky ” shortly after the renewal of the altar/pedestal. GI’s visage appears on the front of the “Yax Wayib” Mask which dons the headdress of *Chaak*, and is named in the accompanying text as *GI Yax Wayib Chaak*. If Copan Stela J holds an era passage (see Chapter III.10), then GI’s actions are also tied to the enigmatic **T1078-“FLINT FACE”** expression and the 5-“flower” locale.

11) BOLON YOKTE'

Location: *Dresden Codex* page 60 (39), Section A (C1)
K2796 secondary text, C4
K7750 secondary text, C4
Portrait found on *Dresden Codex* page 60 (39), Section A



Figure a. *Dresden Codex* page 60, block C1 (photo after Förstemann 1880 courtesy of FAMSI); Figure b. God Portrait on *Dresden Codex* page 60, Section a (photo after Förstemann 1880 courtesy of FAMSI); Figure c. Kerr Vase 2796, block C4; Figure d. Kerr Vase 7750, block C4 (photos c and d, Photographs © Justin Kerr K2796 and K7750).

Comments: The militaristic nature of the *Bolon Yokte'* is well attested on Dresden page 60 where he is illustrated attacking God N with a spearthrower and darts. Unfortunately the verb describing this event is lost, but from the blood gushing from God N's head it is evident that the clash is a violent one. On K2796 and K7750 the *Bolon Yokte'* is listed as a god present in the court of God L and is most likely represented by the *Wuk Chapat Tzikin K'inich Ajaw*, an aspect of the night sun who often incorporates the *Bolon Yokte'* into its godly title (Zender et al. 2003:11; Boot 2008b:6). In other inscriptions outside of era day texts, the *Bolon Yokte'* is linked to warfare and the transition of time (Eberl and Prager 2005).

12) “Caiman” God

Location: Kerr Vase 2796, sitting on the roof above God L’s temple
Kerr Vase 7750, sitting on the roof above God L’s temple



Figure a. Kerr Vase 2796 portrait; Figure b. Kerr Vase 7750 portrait (all Photographs © Justin Kerr K2796 and K7750).

Comments: It has been remarked (Coe 1973:106-109) that the creature above God L is representative of the celestial caiman vomiting water on page 74 of the *Dresden Codex* as well as the god *Itzam Kab Ayin* from the Chilam Balams. On K2796 and K7750 the animal is depicted with a yawning mouth and a “death collar” of disembodied eyes. At the juncture between its backside and tail, is a T501v **HA’** logograph for “water”, a glyph that may indeed connect the creature to flooding and destruction.

13) CHAK EK’ LAJUN CHAN

Location: *Dresden Codex* page 24, Column C (C5-C7)



Figure a. *Dresden Codex* page 24, Column C, blocks C5-C7 (photo after Förstemann 1880 courtesy of FAMSI).

Commentary: **CHAK EK'** "Great Star" is affiliated with a name for Venus. The planet's course is measured by way of its **OK** or its "foot" (as noted in glyph block C3 of *Dresden Codex* page 24) and its cycle was anchored to the era base date.

14) **CHANAL K'UH**

Location: Naranjo, Kerr Vase 2796, Secondary Text (B3-C1)
 Naranjo, Kerr Vase 7750, Secondary Text (B3-C1)
 "Yax Wayib" Mask (A6-B6)



Figure a. Naranjo, Kerr Vase 2796, Secondary Text, blocks B3-C1 (Photographs © Justin Kerr K2796); Figure b. Naranjo, Kerr Vase 7750, Secondary Text, blocks B3-C1 (Photographs © Justin Kerr K7750), Figure c. "Yax Wayib" Mask, blocks A6-B6 (photo by Carl Callaway).

Comments: **CHANAL K'UH** rarely appears alone and is frequently paired with **KABAL K'UH** forming the couplet "Sky God-Earth God." The name therefore could refer to a single deity (p.c. Péter Bíró 2008). If this is the case then on the Vase of the Seven Gods, then seven anthropomorphic deities are pictured and seven deities are named. By a process of elimination, the title falls on the top left-most god on K2796 who sports a large mustache. Alternatively, the name may be a general name expressing multiple gods between earth and sky. On K2796 and K7750 the **CHANAL K'UH** and **KABAL K'UH** are two deities who are "ordered" on era day while on the "Yax Wayib" Mask they are said to have "arrived" at a "bone-flower" locale.

15) **KABAL K’UH**

Location: Naranjo, Kerr Vase 2796, Secondary Text (C2-C3)
Naranjo, Kerr Vase 7750, Secondary Text (C2-C3)
“Yax Wayib” Mask (C1-D1)

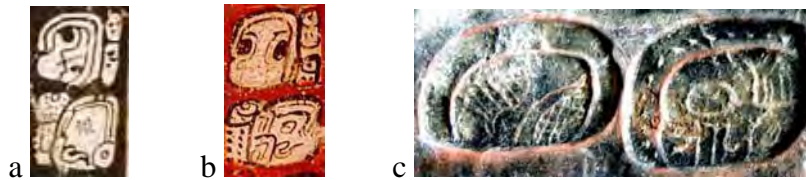


Figure a. Naranjo, Kerr Vase 2796, Secondary Text, blocks C2-C3 (Photograph © Justin Kerr K2796); Figure b. Naranjo, Kerr Vase 7750, Secondary Text, blocks C2-C3 (Photograph © Justin Kerr K7750), Figure c. “Yax Wayib” Mask, blocks C1-D1 (photo by Carl Callaway).

Comments: See comments on the deity **CHANAL K’UH**.

16) **IHK’ NAH YAX-?**

Location: Quirigua Stela C, East side (B10)



Figure a. Quirigua Stela C, east side, block B10 (drawing by Annie Hunter).

Comments: Stela C records that this enigmatic god erects the second of three stones in a locale named **STONE “EARFLARE.”** The god is depicted with a saurian-like mouth out of which curl a gigantic set of fangs. He seems to possess no lower jaw bone. The initial part of his title literally reads “black

house? great . . .” indicating a possible place of residence. With no obvious mention of this god elsewhere in the corpus, he remains unknown.

17) “Jaguar God of the Underworld”

Location: Naranjo, Kerr Vase 2796, Secondary Text (C10)
Naranjo, Kerr Vase 7750, Secondary Text (C10)
Coba Stela 1 West Side (block M20)
Portraits on Kerr Vase 2796 and Kerr Vase 7750



Figure a. Kerr Vase 2796 (Photograph © Justin Kerr K2796); Figure b. Kerr Vase 7750 (Photograph © Justin Kerr K7750); Figure c. Coba Stela 1, block M20 (drawing by Carl Callaway); Kerr Vase 2796, Secondary Text, block C10 (Photograph © Justin Kerr K2796).

Comments: The “Jaguar God of the Underworld” is the top, rightmost god seated closest to God L on the Naranjo painted vases. His right hand lays claim to a tribute bundle in a gesture of offering. He is the only god who wears the “Jester God” headband which is a sign of royal authority (p.c. Erik Boot 2008), indicating that he had previously acceded into lordship and therefore may hold the highest rank of the tribute bearers pictured. The god’s presence on Coba Stela 1 indicates his key role as a custodial god in the renewal of the Long Count.

18) JAWANTE’CHIJ

Location: Naranjo, Kerr Vase 2796, Secondary Text (C8-C9)
Naranjo, Kerr Vase 7750, Secondary Text (C8-C9)

Portrait on Kerr Vase 2796 and Kerr Vase 7750



Figure a. Kerr Vase 2796, block C8; Figure b. Kerr Vase 7750, block C8; Figure c. Kerr Vase 2796 portrait; Figure d. Kerr vase 7750 portrait (all Photographs © Justin Kerr K2796 and K7750).

Comments: Identified by Zender and Guenter (2003:104-109) as the “Deer with Mouth Agape,” this god is positioned on the K2796 and K7750 as the lower right-most god seated before God L. His head displays a gaping, fleshless jaw and he dons a centipede headdress of the *Wuk Chapaht Tz’ikin K’inich Ajaw* ringed by disembodied eyes that reinforces his underworld associations. His large hollow eye orbit and jutting teeth are also indicative of a fleshless skull that is typical of death god iconography. A strong possibility exists that this god is yet another aspect of the multi-faceted solar deity. A portrait of the Sun God holding a deer head in its lap (in very much the same manner the Moon Goddess holds a rabbit) occurs at Piedras Negras (Chinchilla 2006:40-58; Stuart 2009). Also the “Sun Deer” with a pair of cross-bones in its eyes is a common portrait that substitutes for the **K’IN** sun logograph (Thompson 1962:366).

19) “KUKAY”-EK’

Location: Dos Pilas Panel 18 (A3)



Figure a. Dos Pilas Panel 18, block A3 (drawing by Steven Houston).

Comments: This god is identified as a firefly by Luis Lopes (2006). Its portrait includes: fire scrolls issuing from the mouth, the **AK’AB** sign for night infixed into its forehead and a disembodied eye or eyes ringing the skull. The star sign **EK’** is prefixed to the god’s title. Unfortunately the event connected to this god is eroded away on Dos Pilas Panel 18 but if later historical events involving the same god are meant to reflect mythic acts (see Panel 18, block G1), the intended action is some type of fire event involving an **U TAJ TUNIL** or “torch stone” (Houston and Stuart 1990). One speculates if there is a connection with this fire bearing god and the **JUL -?- K’AK’** event mentioned on Quirigua Altar P’ (L2).

20) OX “LUT” K’UH - “Triad God”

Location: Kerr Vase 2796, Secondary Text (C6-C7)

Kerr Vase 7750, Secondary Text (C6-C7)

Dresden Codex page 69 (49), Column C-D (C2-B2)



Figure a. Kerr Vase 2796, block C6 (Photograph © Justin Kerr K2796); Figure b. Kerr Vase 7750, block C6 (Photograph © Justin Kerr K7750); Figure c. *Dresden Codex* page 69, block C2-B2 (photo after Förstemann 1880 courtesy of FAMSI).

Comments: The “Triad” God appears in a pre-era day passage (*Dresden Codex*, page 69) and in era day texts on K2796 and K7750. The “Triad” God is a misnomer in that this title frequently appears when introducing a set of three deities like those of the Palenque Patron gods GI, GII, and GIII (Stuart 2005b:160). So in all likelihood, it refers to a triadic group of deities and not a single god. Perhaps then in the *Dresden Codex* it refers to the three gods: the *Bakabs*, *16 Yok’in* and the *Aj Winik* that occur nested within a numerical count shortly before era day. On the K2796 and K7750 Zender and Guenter (2003:104-109) relate the triad title to GI.

21) “Paddler Gods”

Location: Piedras Negras, Altar 1, Fragment B (M1)
 Quirigua Stela C, East side (A8-B8)
 Quirigua Altar P’ (N2b)
 Quirigua Zoomorph G (S1?)
 “Tila” Stela A (B8)
 Tonina Mon. 34 pE?



Figure a. Piedras Negras, Altar 1, Fragment B, block M1 (drawing by John Montgomery); Figure b. Quirigua Stela C, East side, block A8-B8 (drawing by Annie Hunter). Figure c. Quirigua Altar P’, block N2b (drawing by Matthew Looper); Figure d. “Tila” Stela A, block B8 (drawing by Hermann Beyer).

Comments: The “Paddler Gods” first identified by Mathews (2001:394) are paired deities seen often ferrying gods in a dugout canoe. The portrait heads of each aged god bear wrinkled jowls, jutting toothless jaws. The “Jaguar Paddler” displays the ear, canine and spots of a jaguar and the “Stingray Paddler” wears a pierced bone (“stingray” spine) through the septum of his nose (Mathews 2001:394). Variant logographs night (**AK’AB**) and day

(**K'IN**) substitute for their respective names (Villela 1991) revealing their dualistic nature representing night and day. Their role as paddlers are best known from Tikal Burial 116 bones MT38a and MT38b that show them at the bow and stern of a boat transporting a deceased Maize god through the underworld waters (Stone and Zender 2011:51). Yet, they are also depicted on various ceramics as the boatmen who carry the Maize God to his place of rebirth (Quenon and Le Fort 1997). Finally as Jimbal Stela 1 and Ixlu Stela 2 attest, **MUYAL** cloud scrolls coil around these gods as they float above rulers performing various rites; Jimbal Stela 1 reinforces this cloud-rain association by adding to their appellatives the title of the rain god **NAH JO' CHAN CHAAK**; in some cases the “Paddler Gods” might perform possible rites of “bathing” (**AT**) (Stuart et al. 1999). Finally on Quirigua Zoomorph G, East side (N2) the “Paddler Gods” carry the **MUYAL-li** cloud logograph in their title. On era day, these gods are related to three actions: Quirigua Stela C records that they erect the first of three stones in a sacred locale named **NAH JO' CHAN “JAGUAR THRONE”**; Piedras Negras Altar 1 associates them directly to the “changing of the altar/pedestal” event; while “Tila” Stela A relates the pair to a possible “bathing” event.

22) “Principal Bird Deity”

Location: “Yax Wayib” Mask (D4)



Figure a. “Yax Wayib” Mask, block D4 (photo By Carl Callaway).

Comments: The “Principal Bird Deity” is depicted often sitting perched atop celestial “sky bands” and the branches of “world trees” in Maya iconography as seen on Palenque’s Temple of the Cross (Bardawil 1976; Cortez 1986). The bird is very much the avian counterpart of God D and often wears the

same diadems and necklace of God D (Boot 2008b; Stone et al. 2011:47). The bird is seen morphing into God D on a codex style vase published by Hellmuth (1987:268, figs. 578 and 579). So fused are these two gods that their combined portraits glyphs serve as a theonym for God D on the “Yax Wayib” Mask (C4-D4) as well as on Xcalumkin, Column 5 (A2) and Column 3 (A5) and Kerr Vessel No. 7727 (Boot 2008b:18). There is little doubt that when God D is present the “Principal Bird Deity” is somewhere close at hand and vice versa. Despite their close connection there is no pictorial representation of the “Principal Bird Deity” on era day. Yet the new God D Court Vessel analyzed by Erik Boot (2008b) depicts the bird standing atop the head of the “**CHAN** bird head” (with an axe in its eye) that is the substitute for the T561 “**CHAN**” sky glyph. As Boot (2008:24-25) astutely points out that this small axe is the diagnostic element in the head variant of the number six and it identifies the bird head with an axe infix to be a representation for the **6-SKY** location **WAK CHAN**. This being the case, the “Principal Bird Deity” literally stands aloft the celestial realm of the **WAK CHAN**, a place where not only resides the court of God D but by proxy the **WAK CHAN AJAW** gods who oversee era day events (as noted on block D5 of the “Yax Wayib” Mask and Quirigua Stela C east, block B26).

23) TE’ God- “Patron of the Month PAX”

Location: Naranjo, Kerr Vase 2796, Secondary Text (D1)
 Portrait on Kerr Vase 2796 and Kerr Vase 7750
 Quirigua North Face, portrait of a dancing Te’ God



Figure a. Kerr Vase 2796, block D1; Figure b. Kerr Vase 2796 portrait; Figure c. Kerr Vase 7750 portrait; (all Photographs © Justin Kerr K2796 and K7750).

Comments: The **TE'** God is present on Kerr Vase 2796 as the middle god on the upper row seated before God L. On Kerr Vase 7750 he occupies the same position (upper row, second from the right) behind the “Jaguar God of the Underworld.” His name glyph (the head variant of the **TE'** sign meaning “tree”) occurs in the Kerr Vase 2796 secondary text as an isolated glyph in a square cartouche beside the **4 AJAW** day name. His role on era day remains unspecified but as a tree it is likely that he relates to a primordial tree and his large square orbits and crossed eyes relate him to the Sun God. He is pictured on the north face of Stela C dancing (Looper 2003:166 after p.c. Paul Johnson), although it is uncertain if this act is linked to era day. As I have stated previously (Callaway 2006:94-95): “The head variant of the **TE'** glyph is the profile or frontal portrait of a human face missing a lower jaw. The head displays a pair of large crossed eyes (like those of the Sun God), a cruller motif running under the eye socket, and a disembodied jaguar paw above the ear. From its jawless mouth dangle root-like protrusions. This face is a portrait of the very same head that inhabits the trunks of many trees painted on Classic vases (see Kerr vases K1226 and K4013) . . . The head variant of the **TE'** sign is often referred to as the Patron God of the month *PAX* or simply the *PAX* God. Head and full-figure portraits of the *PAX* god are nested above the central element of the Introductory Glyph from a Long Count inscription when the Long Count records a date falling within the month of *PAX*.”

24) **WUK CHAPAHT TZ'IKIN K'INICH AJAW**

Location: Kerr Vase 2796, lower leftmost god seated in front of God L
Kerr Vase 7750, top leftmost god seated in front of God L



Figure a. Portrait from Kerr Vase 2796 (photo from Coe 1970:106); Figure b. Portrait from Kerr Vase 7750 (Photograph © Justin Kerr K7750).

Comments: This god has all the diagnostic traits typical to the *Wuk Chapaht Tz'ikin K'inich Ajaw* including: a boney, centipede headdress and a headband with sun sign **K'IN** infix (since painted over by the restorer as pointed out by Milbrath 1999:91). Interestingly this god on K7750 is placed in the upper row just below the mention of its name located in the PSS rim text. The *Bolon Yok Te'* and the Sun God are known to have strong ties to the *Wuk Chapaht Tz'ikin K'inich Ajaw* (Boot 2008b:6) and can incorporate each other's titles (see *Bolon Yok Te'* comments).

25) UXLAJUN/BOLON CHAN NAL- "OWL GOD"

Location: Kerr Vase 2796, sitting on God L's hat
Kerr Vase 7750, sitting on God L's hat



Figure a. Portrait of bird on Kerr Vase 2796 (Photograph © Justin Kerr K2796); Figure b. Portrait of bird on Kerr Vase 7750 (Photograph © Justin Kerr K7750).

Comments: This owl god serves as a companion to God L and its name may refer to the thirteen levels of the cosmos (Zender et al. 2003:105). The wing of this god is sometimes pictured dripping heavily with water; the dripping wing itself serves as a prefix on God L's name glyph (see *Dresden Codex*, page 46, section b, block E2; Zender p.c. 2009).

26) WAK CHAN AJAW

Location: Quirigua Stela C, East side (B15)
"Yax Wayib" Mask (D5)

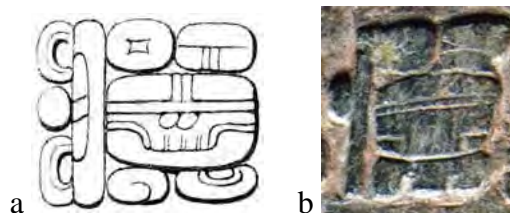


Figure a. Quirigua Stela C, East side, block B15 (drawing by Annie Hunter); Figure b. “Yax Wayib” Mask, block D5 (photo by Carl Callaway).

Comments: This title may refer to one god or a group of six gods who according to Quirigua Stela C, oversee the close of the 13th *bak'tun*. They may be a set custodial gods who aid in the close and renewal of the *bak'tun* period. On the “Yax Wayib” Mask it is noted that the events of the day happen at the *Wak Chan Ajaw* domain where no doubt the *Wak Chan* lords reside. If the newly discovered God D Court vessel is any clue (Boot 2008b), these lords may reside in the Court of God D (see comments on the Principal Bird Deity). Lastly, The Maize God on Kerr Vase K8009 is named the *Wak Chan Winik* (Freidel et al. 1993:244) leading to the possible identification of the Maize God with this title. Therefore the Maize god may be one of the *Wak Chan Ajaw* deities who over see era day events.

27) WAKLAJUN YOK'IN

Location: Chichen Itza, The Caracol (Structure 3C15), Hieroglyphic Band, Fragment 5 (A2)

Dresden Codex page 61 (41), Column A-B (A7-B7)

Dresden Codex page 69 (49), Column C-D (C7-B7)



Figure a. Chichen Itza, Hieroglyphic Band, Fragment 5, block A2 (drawing by Carl Callaway; Figure b. *Dresden Codex* page 61 Column A-B, block A7-B7 (photo after Förstemann 1880 courtesy of FAMSI.); Figure c. *Dresden Codex* page 69 Column C-D, block C7-B7 (photo after Förstemann 1880 courtesy of FAMSI).

Comments: The **16 YOK'IN** is not a well understood deity but it is clear from the *Dresden Codex* pre-era day accounts (page 61 and 69) that it was created along side a count of *k'atuns*. The root of its name is derived from the **OK** T765a dog head and is strikingly similar the **yo-OK-ki** “his foot” designations used often in the **WA'LAJ YOK** expressions in the *Dresden Codex* to indicate the position of a god’s “foot” along a celestial path during a particular day (Callaway 2009). The god’s name literally translates as “16 foot sun” and might relate to tracking the solar year (p.c. Barbara MacLeod 2008). The deity appears prominently on Palenque’s Temple of the Inscriptions, West and Central tablets during *k'atun* celebrations and is accompanied often by the god *Bolon Chan Yok'in*.

28) YAX SUTZ'- Blue-Green Bat God

Location: Kerr Vase 7750, lower leftmost god seated in front of God L
Coba Stela 1 (N20)



Figure a. Portrait of lower leftmost god on K7750 (Photograph © Justin Kerr K7750); Figure b. Coba Stela 1, block N20 (cropped from a photo in Thompson et al. 1932: plate 2).

Comments: The bat god's portrait occurs on K7750 with its diagnostic up-turned bat snout in profile. He is listed on Coba Stela 1 as one who witnessed the turn of the new era. His activities remain obscure although in an unrelated era day text on Tortuguero, Monument 6 he is listed as a god who helps awaken the hearts of "eight turtle Bakabs and the four raccoons" whose duty it is to set in orderly motion the time cycle of the *Kalabtun* (Gronemeyer and MacLeod 2010:56).

Enigmatic Gods in the Dresden Codex

29) CHAK "BOLAY"

Location: *Dresden Codex* page 24, Column C (C9)

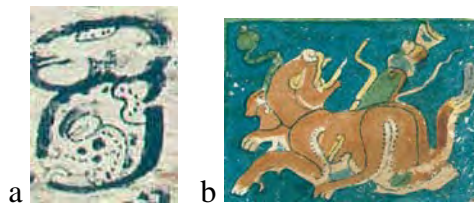


Figure a. *Dresden Codex*, block C9; Figure b. *Dresden Codex* page 47, Section c (all photos after Förstemann 1880 courtesy of FAMSI).

Comments: Another god who is said to be "wounded" (see comments for God K). He is pictured in the *Dresden Codex* on page 47, Section c, and appears fallen and speared with darts (Schele and Grube 1997:143). The spears might represent "dazzling light rays evident when Venus becomes visible upon the morning helical rise" (Aveni 1989:228).

30) "Seated" God (T226)

Location: *Dresden Codex* page 24, Column C (C11)



Figure a. *Dresden Codex*, block C11; Figure b. *Dresden Codex* page 49, Section c (all photos after Förstemann 1880 courtesy of FAMSI).

Comments: Another god who is said to be “wounded” (see comments for God K). The T226 god may be related to the frog or turtle like creature on *Dresden Codex* page 49, Section c, who appears fallen and speared with darts (Schele and Grube 1997:143). Versions of his glyphic title may consist of a “turtle” head with an infixed **KAN** sign in the eye in conjunction with the T226 sign (page 49, block E6), or the numeral 4 with the T226 sign (p.c. Michael Grofe 2012).

31) “Tattooed Eye” God (T1055), God Q?

Location: *Dresden Codex* page 24, Column C (C12)



Figure a. *Dresden Codex*, block C12; Figure b. *Dresden Codex* page 49, Section c (all photos after Förstemann 1880 courtesy of FAMSI).

Comments: Another god who is said to be “wounded” (see comments for God K). The T1055 god is pictured in the *Dresden Codex* on page 50, Section c, who appears fallen and speared with darts (Schele and Grube 1997:143).

32) “Opossum Bakab”

Location: *Dresden Codex* page 60 (39), Section A (D3)



Figure a. *Dresden Codex* page 60, Section A, block D3 (photo after Förstemann 1880 courtesy of FAMSI).

Comments: The god appears on page 60 directly after the mention of the **TOK PAKAL** (flint-shield) the *Bolon Yokte*. His netted headdress is diagnostic of a *bakab* headdress and therefore designates him as one of the four gods who hold up the sky; he appears prominently in the New Year Pages of the *Dresden Codex* (pages 25-28) associated with the last five days of the year (Thompson 1972:90, plate 25-28). The opossum *bakab* is also linked to fire rituals in the Long Count Initial Series (Grube 2000:101). In the *Chilam Balam of Tizimin* and the *Popol Vuh*, the opossum presents himself as “lord of the half-light preceeding dawn” and in other myths outside the Maya area he is represented as a “New World Prometheus” who steals fire and gives it to man (López Austin 1993:6-7).

33) God N BAKABS?

Location:

Dresden Codex page 61 (39) (A5-B5)

Dresden Codex page 69 (49), Column D (A5-B5)

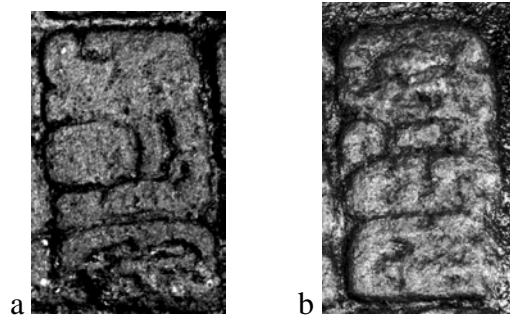


Figure a. *Dresden Codex* page 61, block A5-B5 (photo after Förstemann 1880 courtesy of FAMSI); Figure b. *Dresden Codex* page 69 Column D, block A5-B5 (photo after Förstemann 1880 courtesy of FAMSI).

Comments: The netted bows atop the heads of these gods distinguish them as aspects of the god *Bakab*. Their true identity remains obscure yet they appear as custodial gods in conjunction with the creation of *bak'tun* and *k'atun* counts in a pre-era day episode cited on *Dresden Codex* page 61 and 69.

Enigmatic Gods on Monuments

34) “Square-Nosed-Beastie” SAK YAX CHAN



Location: Quirigua Altar P’ (M2b) and (N1b)
Copan Stela J West Side (p19)?

Figure a. Quirigua, Altar P’ text (M2b); Figure b. Quirigua, Altar P’ text (N1b) (photos by Giles Healey courtesy of University of Pennsylvania Museum of Archaeology and Anthropology).

Comments: This fret-nosed god is said to be “downed” or possibly defeated on era day. He is a god who is associated with custodial gods of time as noted on Tortuguero Monument 6 (L5) and is linked with deep time events at Naranjo (Altar 1) and Palenque (Temple of the Inscriptions) and Copan Stela J (p19) (Gronemeyer and MacLeod 2010:55). Interestingly, the *Sak* “Square-nosed Beastie” *Chan* is mentioned as part of the king’s title (as a

possible name incorporation) on Quirigua Zoomorph P, Circular Cartouche 11 (as well as a conflated version at Altar P' at block Q2). Also on Tortuguero Monument 6, the *Yax Chan* entity is mentioned again at block G8 in connection to a war with Comalcalco (Gronemeyer and Macleod 2010:49) as the locale where a divine force is said to be replenished.

35) Unknown God

Location: Copan Stela 23, side C (F2)



Figure a. Copan Stela 23, side C , block F2 (drawing by Sylvanus Morley).

Comments: With only Morley's drawing to consider of the now lost Copan Stela 23, it is difficult to identify the god carved in block F2 with any certainty. Although it is obvious that he must be a god connected directly to the changing of the altar/pedestal event mentioned in blocks E1-F1. So in all likelihood he could be one of the "Jaguar Paddlers" or even the god GI.

Enigmatic Gods on the Vase of the Seven and the Eleven Gods

36) "Bigote" God

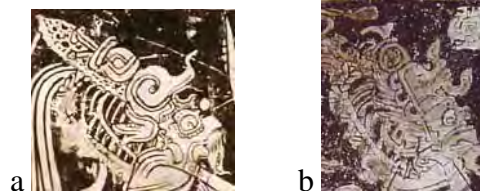


Figure a. Kerr Vase 2796 portrait; Figure b. Kerr Vase 7750 portrait; (all Photographs © Justin Kerr K2796 and K7750).

Location: Kerr Vase 2796, upper leftmost god sitting in front of God L
 Kerr Vase 7750, upper god seated (3rd to the left) behind the TE' God

Comments: This god has a glyphic caption near its head (on Kerr Vase 7750) that may serve as a name tag. His most distinguishing feature is that of a large mustache. He may be representative of the **CHANAL K'UH KABAL K'UH** (see comments on **CHANAL K'UH**).

37) “Three Long-Beaked” Gods



Figure a. Kerr Vase 7750 portraits (all Photographs © Justin Kerr K7750).

Location: Kerr Vase 7750, the lower central gods (2nd, 3rd, and 4th to the left) seated in behind the “Deer” god on the lower row.

Comments: I do not think these gods are acting as “filler gods” since their iconography distinguishes them in distinct ways. The three additional gods wear similar shawls and belts to the other gods but they differ in other manners of dress; the three wear skirts that are painted black with white crossed-bones and spiny shell-like circles; they don large black bulb-like hats studded with death eyes and two are capped off with a “leafy *ak'ab*” sign; below the rim of each hat is a headband displaying a diadem topped off by a feather; the backs of the headdresses are adorned with one or two owl feathers a tufts of quetzal feathers with tassels; finally disembodied death eyes float around the heads of all four characters. The front-most of these three wears a giant frilly collar studded with death eyes and on which hangs a jewel pendant marked with a death “percent” sign; his mouth is that of a long beaked bird with jagged “teeth” and his cheeks are feathered; finally sitting in front of him is an additional tribute bundle marked with **B'OLON EK' KAB** glyphic signs. The middle gods are a near replica in dress and facial

characteristics of the god in front. The left-most god of similar dress and accoutrements but wears no collar studded with death eyes.

38) “Saurian Earth” God



Figure a. Kerr Vase 2796 portrait; Figure b. Kerr vase 2796 portrait (all Photographs © Justin Kerr K2796 and K7750).

Location: Kerr Vase 2796, sitting at the base of God L’s temple
Kerr Vase 7750, sitting at the base of God L’s temple

Comments: This god may just represent a flattened-out **WITZ** mountain mask that is connected to the vertical **WITZ** masks forming the walls of God L’s Temple. Tedlock (2010:37) likes to think of it as a “subterranean” earth god that is the counterpart of the “celestial” caiman sitting on the top of the temple.

Possible Era day Gods in the Madrid Codex

39) God A, God A', and God M

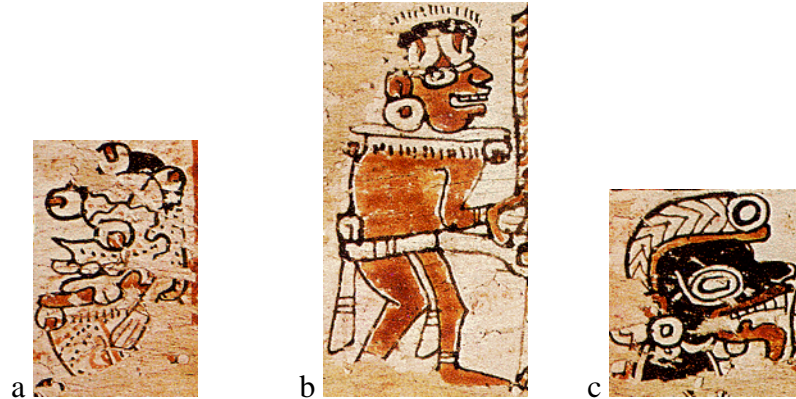


Figure a. God A Portrait, Madrid Codex Page 19, Section b; Figure a. God A' Portrait, Madrid Codex Page 19, Section b; Figure a. God M Portrait, Madrid Codex Page 19, Section b (all photos courtesy of FAMSI).

Location: Portraits on Madrid Codex, Page 19 Section b

Comments: God A, God A', and God M along with God D and God B appear on Madrid Codex page 19 standing outside a temple. They perforate their penises with a bloodied cord (Schele 1976:24). Four gods stretch the cord to the four directions while the fifth deity (God D) passes the rope through his penis and then through the back of a turtle-capstone and down to the base of the building (Hull and Carrasco 2004:134). This “ecliptical cord” is representative of the solar path and serves as the means by which blood is fed to the sun; the sun itself is represented by the **K'IN** glyph wheeling along the cord near the top left of the temple vault (Milbrath 1999:74-75). Since God A, God A', and God M are not found in any other era day texts, their role as custodial era day gods remains tentative.

Appendix IV

A List of Era Day Place Names

The following is an alphabetical list of era day place names and the monuments on which they occur. Also noted are supplementary locations of the names (but not all) that are found outside of era day contexts. These toponymns describe the mythological regions within the primordial landscape at the start of the era. There is mounting evidence that these sacred places are not only representative of mythic locales but are also tied to the physical landscape that shaped the Maya world like caves, cenotes, rivers and mountains. Some of the names display direct ties to the physical landscape (e.g. mountain, sky and water) and to various cardinal zones. As with names of Classic Maya cities, mythic and geographic spaces coexist. For instance, Palenque refers to itself as *Matawil* which is the birthplace of the cities patron gods; the city of *Huxte' K'uh* is literally the place of “Three-Tree God”; Seibal incorporates the *Yax-“Three-Stone”-Nal* toponymn into its place name.

1) **CHAN**

Location: Palenque, Temple of the Cross, Main Panel (D7b)



Figure a. Palenque, Temple of the Cross, Main Panel, block D7a (drawing by Linda Schele courtesy of David Schele).

Comments: **CHAN** is the general term for sky. On Palenque's Temple of the Cross it is said to be the locale from which the God GI descends.

2) **CHAN CH'EN**

Location: Quirigua Zoomorph G (S1)

Supplementary Location: This location is very common throughout the inscriptions.

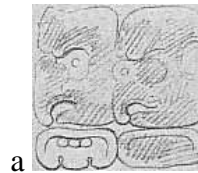


Figure a. Quirigua Zoomorph G, block S1 (drawing by Annie Hunter).

Comments: This paired toponym is a combination of a **CHAN** sky sign and that of a possible **CH'EN** “cave” sign. Seemingly, it denotes a general place between sky and cave (earth) but it may refer to the central location like a sacred cave within a city (see Stuart et al. 1994:12-13).

3) **HA'**

Location: *Dresden Codex* page 61, Column B (B12)

Dresden Codex page 69, Column D (D11)

Supplementary Location: Dresden Page 70 Column D (D14); Dresden Page 51 Column A (5b).



Figure a. *Dresden Codex* page 61, Column B, block B12 (photo courtesy of FAMSI);

Figure b. *Dresden Codex* page 69, Column D, block D11 (photo courtesy of FAMSI).

Comments: “Water” is the meaning of this unambiguous T501 glyph. It is used in the *Dresden Codex* to denote the “primordial’ waters where new counts of days form. For instance, on Dresden page 61 (B12-A13) a phrase reads **ULOK’ PIK OCH TI HA’ JUN PIKTUN** for “it emerges (the) *bak’tun*, enters into water one *piktun*.” The context in this instance is mathematical and therefore the term “water” may relate conceptually to the act of addition. Here the Long Count (when written vertically) is thought of as a column; the bottom of the column sit submerged in water into which numbers to be counted “dive” into; as these numbers grow in value they successively rise and ascend through the various levels of time periods and out the top of the column (p.c. Barbara MacLeod 2008). For an alternative view, see Grofe (2007:128-129) who states that **UCH HA’** is related to subtraction and **PAT** is addition.

4) JO’ “Flower” NAL

Location: Piedras Negras Altar 1, Fragment B (P2)
Copan Stela J West side (p28)

Supplementary Locations: a façade glyph from Copan Temple 22a and Copan Stela C, North (10b) (Stuart et al.. 1994:79); Cancuen Panel (P5); Kerr Vases K1609, K8457, K6020.



Figure a. Piedras Negras Altar 1, Fragment B, block P2 (drawing by John Montgomery).

Comments: The Five “Flower” place (Stuart et al. 1994:69; Boot 2006:13; 2008b:8) is a locale where important mythological events took place (e.g. Kerr No. 1609). It is a place where shaping and sculpting occurs (e.g. Kerr Nos. 0717, 7447, 8457; and is identified as a place where scribes originate Kerr

No. 6020; see Boot 2006:13). In the case of Piedras Negras it is a place where *K'inich Yo'nal Ahk II* “witnessed” the era day event. The **JO’ “Flower” WITZ** on Piedras Negras Lintel 3 (Stuart et al. 1994:40) and on the Cancuen panel (Schele and Looper 1996:146) are referred to as places of burial for a king. This flowery place could also be referring a floral paradise linked to the adobe of the gods and realm of the sun (Taube 2004:69) that is like-in-kind to the Aztec sacred place in which all myth originates known as *Tamoanchan* and called “Where-the-Flowers-Grow” (López Austin 1993:54). By witnessing the era event the ruler is emphatically saying that he is attesting to those primordial events at the start of the era from the standpoint of a paradisaal realm.

5) **KAB-“EARFLARE”-ma?**

Location: Quirigua Stela C, East side (A11-B11)

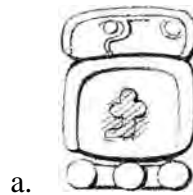


Figure a. Quirigua Stela C, East side, block A11-B11 (drawing by Annie Hunter).

Comments: According to the Quirigua Stela C text, this is the place where the second stone altar/throne was set. The presence of the **KAB** logograph (earth) connects the name to a terrestrial space. The main sign looks suspiciously like a depiction of a jade earflare and may be similar to the main sign used in the **ALAY** expression (sign XG2 see Macri et al. 2009:298) in the dedicatory texts on pottery.

6) **K'INICHIL**

Location: Vase of the 11 Gods (K7750), Secondary Text (C11-12)



Figure a. Vase of the 11 Gods (K7750), Secondary Text, blocks C11-12
(Photograph © Justin Kerr K7750).

Comments: This location reads “Great Sun Place”, and perhaps refers to the place of the Sun God (Stuart 2011a:224). It describes the realm where the group of gods gather on the Vase of the Seven Gods (K2796) and the Vase of the Eleven Gods (K7750).

7) **MIH-IHK'?-NAL**

Location: Quirigua Altar P' (L2a)

Supplementary Location: Copan Stela J West Face (p21) (as **8-MIH-NAL**)

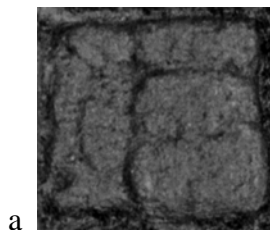


Figure a. Quirigua Altar P', block L2a (photo by Giles Healey courtesy of Pennsylvania Museum of Archaeology and Anthropology).

Comments: This is a locale not well understood that is connected to a place where a “spearing of fire” takes place as cited on Quirigua Altar P'.

8) NAH JO' CHAN

Location: Quirigua Stela C, East side (A9-B9)
Tonia Monument 34 (pH?)

Supplementary Locations: Copan Altar 41 west side (inscribed within the “grape-cluster” of the **TUN** infix); Santa Rita Murals; K688.

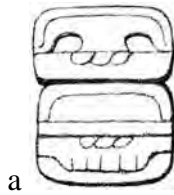


Figure a. Quirigua Stela C, East side, block A9 (drawing by Annie Hunter).

Comments: *Nah Jo' Chan* is the place where the first stone throne is “planted” by the “Paddler Gods” according to the Quirigua Stela C text. The location has a strong association with the North (*xaman*) as is indicated on Kerr vessel K688 where it is said to be the dark locale where the “Baby Jaguar” sits on a zoomorphic stone-serpent-throne (Stuart et al. 1994:71-72); the accompanying text on K688 reads **NAH JO' CHAN “THRONE” XAMAN.**” The name also appears near the top of Copan zoomorphic Altar 41 within the “grape-cluster” infix of the *tun* logograph. On Altar 41, the open jaws of this double-headed serpent throne are remarkably similar in character the same throne depicted on K688 and could act in part as a carved 3D conceptualization of the **NAH JO' CHAN** locale as a mountain (p.c. Simon Martin 2011). The “Paddler Gods” are frequently cited as the *Nah Jo' Chan Ajaw* as well as GII of the Palenque Triad (Stuart et al. 1994:71).

9) T'I CHAN YAX-“THREE-STONE”-NAL

Location: Palenque, Temple of the Cross, Main Panel (D6-C7)
 Piedras Negras, Altar 1, Fragment B (M2-N2)
 Quirigua Stela C, East side (B13-A14)
 “Yax Wayib” Mask (B2)

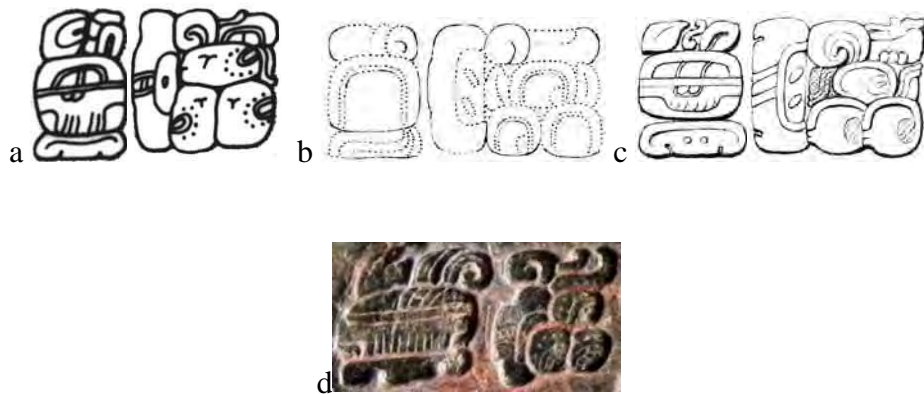


Figure a. Palenque, Temple of the Cross, Main Panel, blocks D6-C7 (drawing by Linda Schele courtesy of David Schele); Figure b. Piedras Negras, Altar 1, Fragment B, blocks M2-N2 (drawing by John Montgomery); Figure c. Quirigua Stela C, East side, blocks B13-A14 (drawing by Annie Hunter); Figure d. “Yax Wayib” Mask, block B2 (photo by Carl Callaway).

Supplementary Locations: Aguateca Stela 2(A2, F3), Copan Stela 16; Seibal: H.S. Tablet 2 (K1 K2), H.S. Tablet 4 (V1, W1), H.S. Tablet 5 (DD2), H.S. Tablet 6 (EE2, II1), Stela 8 (B4), Stela 9 (E2), Stela 10 (B11), Stela 11(B2, E1), Stela 12 (A8), Stela 21 (B7); Anonal Panel 1 (A3) Madrid Codex, page 43, Section b, Column 7 (A1); Madrid Codex page 98, Section a (three stones on the back of a turtle); Paris Codex Page 23, Section a (C4); Tonina (in headdress of figure); Salinas de Nuevo Cerros Stela 1, left (B2); Cancuen Panel (N10?, P6)

Comments: This is the most widely quoted era day locale and is found in Early Classic, Late Classic texts spanning over a four hundred year period (Figure V.1). It also serves as the Emblem Glyph of Seibal (Stuart and Houston 1994:26; Schele and Mathews 1998:176). In its most simplified form, it depicts three stones stacked in a triadic arrangement with each stone carrying the *tun* infixes (loops and dot-cluster) of the **TUN** logograph. Sometimes “foliage” of some sort emanates from behind the stones. The stones are theorized by many scholars to relate to a cosmic hearth and mirror the three “stone altar/thrones” quoted in the Quirigua Stela C text; additionally they may relate to the stars of Rigel, Alnitak and Saiph within the Orion constellation (Freidel et al. 1993;Looper 1995; Schele and Mathews 1998:176; Taube 2004; Tedlock 2010:41). As Carrasco (2005:464) and Stuart and Houston (1994:26) pointed out, the “**THREE-STONE-PLACE**” logogram carries a /-mi/ suffix on Seibal’s Hieroglyphic Stairway Step 3; Carrasco tentatively proposes **SIIM TUUN** or **SAAM TUUN** (Yucatec) or **OX YOKET** (Tzotzil and Tzeltal); he suggests a full reading of the collocation might then read **UX SIM TUUN NAL** for “three-heated-stone-place.” Recently, Stuart (2011a:220) also reads the sign as **YOKET**.

10) SAK-“BONE-FLOWER”-NAL

Location: “Yax Wayib” Mask (A5)

Supplementary Location: none.



Figure a. “Yax Wayib” Mask, block A5 (photo by Carl Callaway); Figure b. “Yax Wayib” Mask, block A5 (drawing by Carl Callaway).

Comments: This is the place where the Sky God-Earth God are said to arrive to. The collocation looks to be a representation of a flower with an inset “impinged bone” T571 linking to a possible cave site (p.c. 2012 Sebastian Matteo).

11) **WAK CHAN AJAW** or **WAK CHAN**?

Location: Chichen Itza, Caracol, Hieroglyphic Band, Fragment 5 (B2)
Quirigua Stela C east, (B15)
“Yax Wayib” Mask (D5)



Figure a. “Yax Wayib” Mask, block D5 (photo by Carl Callaway).

Supplementary Locations: Temple of the Cross Tablet (D15); Temple of the Cross Sanctuary Jamb (B7); God D Court Vessel; Naranjo Stela 32, Front; Museo Amparo Throne Back; Kerr vase K8009

Comments: The collocation here is simply the combination of the number “six” and “sky” and if taken literally may relate to the sixth or six levels of sky. The **WAK CHAN AJAW** are said to a lord or lords who “supervise” era day actions (see Quirigua Stela C east side (B15). On the “Yax Wayib” Mask (D5) it is the place where events are said to take place. It is a location strongly associated with God D as is noted on the *Amparo* Throne Back (Boot 2008b: note 6). On the new God D Court Vessel the locale is represented by a giant bird head (variant of the sky/**BAK’TUN** logograph) on which the “Principal Bird Deity” is perched; the eye of the head carries within it an axe in its eye representative of the number six (Boot 2008b:24-25). Previously, this collocation was thought to read *Wakah Chan* (Freidel et al. 1990:426, footnote 8) but the term as derived as such makes little

sense linguistically and is in fact a misnomer (for a full discussion see Callaway 2006:85-86).

Potential Era Day Place Names

12) **BOLONLAJUN OCH HA'**

Location: *Dresden Codex* page 61, Column A (A16)

Supplementary Locations: *Dresden Codex* page 33, section b, and page 34 section b; page 35 section b.



Figure a. *Dresden Codex* page 61, Column A, block A16 (photo after Förstemann 1880 courtesy of FAMSI).

Comments: This place name is associated with a count leading up to the pre-era date 19.19.19.16.3.16.14.11.4 9 *K'an* 12 *K'ayab* (Beyer 1943) and is prefixed by the number nineteen. It is depicted frequently in the *Dresden Codex* (page 33, section b; page 34 section b; page 35 section b) as the numeral nineteen submerged in a watery pool wrapped by a serpent on which the rain god *Chaak* sits (like the waters of a *cenote*). The toponym may also serve as a numerical period (see Appendix VI).

13) **JO' "Flower" TE'**

Location: Copan Stela J West side (p28)



Figure a. Copan Stela J, west side, block p28 (drawing by Linda Schele courtesy of David Schele).

Comments: The Five “Flower” Tree locale is similar in spelling to the Five ‘Square Nosed Beastie” Flower Tree mentioned in conjunction to the 12th *k’atun* celebrations on Palenque’s Temple of the Inscriptions, Central Panel (block A6) and serves as a depiction of a five-limbed tree with five personified blossoms, an example of which is found on a carved shell pendant from Yaxchilan (Callaway 2006:68-69).

14) **OX “SPLIT” WITZ WAK CHAN**

Location: Chichen Itza, the Caracol (Structure 3C15), Hieroglyphic Band, Fragment 5 (B1)

Supplementary Location: **OX WITZ** is a locale mentioned in Naranjo, Caracol and Copan texts and it serves as an Emblem Glyph of Caracol.



Figure a. Chichen Itza, The Caracol (Structure 3C15), Hieroglyphic Band, Fragment 5, block B1 (drawing by Carl Callaway).

Comments: The locale on Caracol Fragment 5 reads “Three Mountain Six Sky.” The triadic reference is of three primordial mountains **OX WITZ** together with

the **WAK CHAN** heavenly locale. A little known Palenque terracotta sculpture may be a depiction of this exact location; the sculpture base displays three *witz* mountain masks for a platform; standing atop the mountains is a human figure emerging from a celestial niche who is flanked by two more human figures (Hero Twins?) possessing blowguns, one of which is aiming at a celestial bird (see on-line, Harvard VIA Photo 58-34-20/42250).

15) “Glyph Y” T24-WITZ

Location: Tonina, Mon.150 (A3)

Supplementary Location:



Figure a. Tonina, Mon.150, block A3 (drawing by Carl Callaway).

Comments: This locale from Tonina Monument 150 is linked to the termination of an enigmatic **3 PIK TE'** cycle. The collocation may be combined with the “flattened toad” Glyph Y (T739 God) from the 819 Day Count (p.c. Michael Grofe 2010). The inset T24 signs (near the top of the cleaved split of the **WITZ** logograph) indicate a resplendent surface of a green stone, like jade (for analysis of the T24 sign see Callaway 2006:92-102).

16) **WITZ** or **PA' WITZ**

Location: *Dresden Codex* page 61, Column A (A17)

Supplementary Locations: none.



Figure a. *Dresden Codex* page 61, Column A, block A17 (photo after Förstemann 1880 courtesy of FAMSI).

Comments: A mountain associated with a count leading up to the pre-era date 19.19.19.16.3.16.14.11.4 9 *K'an* 12 *K'ayab* (Beyer 1943) and is the point where the Calendar Round “enters into the water.” The cross-hatching on the interior of the glyph could indicate the syllable /**pa**/ or simply indicate darkness.

17) “PIERCED FLOWER” [T653/T582]”- T’I-“SKULL?”-?-li?-ni ?

Location: Tila Stela A (A10)

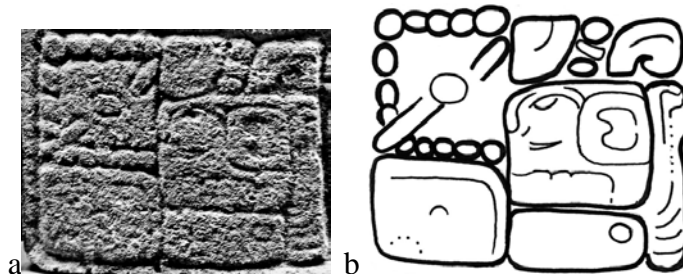


Figure a. Tila Stela A, block A10 (photo by Carl Callaway); Figure b. Tila Stela A, block A10 (drawing by Carl Callaway).

Supplementary Locations: none.

Comments: This locale is likely designated as the place where a ruler from “Tila” is said to witness the era day event. The initial part of the collocation is comprised of a “pierced flower” emblem that is a combination of the T653/T582 logographs. The place may be acting like-in-kind to the **JO’** “**Flower**” **NAL** place name on Piedras Negras Altar 1 Fragment B (P2).

Appendix V

Analysis of the Term K'ojob

The term *k'ojob* is found on the following era day monuments¹⁹¹:

Coba Stela 1, back (N18)

Chichen Itza, The Caracol (Structure 3C15), Panel 1, Right Lateral Face (R9)

Copan Stela 23, sides “A” (D7-D9) and “C” (F1)

La Corona Altar 4 (A'1)

Palenque, Temple of the Cross, Main Panel (D6)

Palenque, Temple of the Sun, Main Panel (E1)

Piedras Negras, Altar 1, Fragment B (L2)

Quirigua Stela C, East side (B6)

In all these cases, the word is spelled using two syllabic signs /**k'o**-/ and /-**b'a**/, with the initial /**k'o**-/ syllable spelled using the T220 sign that is a depiction of a clinched, downward pointing fist (Thompson 1962:449; Boot 2008a:9). The /**k'o**/ syllable was first deciphered by Linda Schele based on a **k'o-jo** or *k'oj* spelling for “mask” on a Site R, Lintel 2 text associated with a figure wearing a mask (Schele 1991b:108). Early in the decipherment of era day texts, it was proposed that the term *k'ob* might read *yeb* for “his stair” (MacLeod 1991) with the T220 holding a syllabic value of /**ye**-/ (the T220 sign is very similar to the T710 /**ye**-/ sign representing the profile of a partially open right hand). As the meaning syllabic signs progressed, it became clear that T220 and T710 held distinct values of /**k'o**/ and /**ye**/ respectively. Schele used the /**k'o**/ value for T220 it to derive *k'oh* the word “image/mask” on the Palenque Cross Tablet (D6) (while discounting the very prominent /-**b'a**/ syllable sitting directly under the /**k'o**-/) as well as on the K6593 Panel (block A4) (Schele 1992:122-123 and 127; Freidel et al. 1993:65-67 and page 70-71). Schele also applied the /**k'o**-/ value to a translation in the Quirigua Stela C era day text (B6) and arrived at a slightly different spelling than that on the Palenque Temple of the Cross example (this time incorporating the /-**b'a**/ syllable into the word) with a reading of *k'ohba* for “image or statue” (Schele 1992:123; Freidel et al. 1993:67). More recently, Freidel and MacLeod (2000) proposed a new reading for the subject of the era day expression at Palenque and Quirigua:

¹⁹¹ See Quirigua Stela F, west side, block B16 and Quirigua Zoomorph P, South text, blocks M3a-M2a for other JEL *k'o-b'a* expressions on non-related era day monuments.

First of all, reevaluation of the Creation text at Quirigua C shows that the *k'ohba* “images(s)” reading was probably not correct. The subject of the “crossed planks” verb in Kan-Balam’s Palenque Creation texts, and in others, must be *k'oob* “hearth”, “trivit”, found in Yucatec *k'ooben* “hearth, hearthstones, kitchen with cognates in Kekchi “*k'ub*”; Chorti and Cholte “*chub*”- probably glottalized: *ch'ub*. The term was now thought to represent “hearthstone” and it relates to the colonial Yucatec Maya word for *k'ob'en* “kitchen, hearth” that is composed of three stones on which a cooking griddle sits (cf. Barrera Vásquez et al. 1980:406, after Boot 2009a:9). This new reading has had favor among leading epigraphers in the field yet others employ a more generalized term of “tripod” rather than hearthstone (Looper 2003:226).

The term *k'ob* is used in the inscriptions outside the context of era day expressions and these additional uses offer evidence toward its spelling as well as insights into its meaning (p.c. Péter Bíró 2008). Additional spellings of the word occur on Copan Structure 30, Altar 19469 (A1) (Schele 1990; Andrews 2005 et al. 2005:285-287) and on Yaxchilan Hieroglyphic Stairway V (Boot 2009:111), Step 16 ,block 81 (Figure AV.4). The Copan altar (Figure AV.1 and AV.2) is circular in shape and flat-topped; it is 30 cm in diameter and 8 cm thick and has a wheel-like shape. A glyphic text is carved on its perimeter edge; the text “states that *u yak' chaak* was brought out or manifested at the celebration of *Yax Pasaj's* first *k'atun* of rule, and the ceramic effigy referred to is the *yitah yahawil* “the companion of the lord or his office” (Andrews et al. 2005:287). This small circular altar makes an ideal platform on which the effigy indicated most probably sat. Notice how scribes spell the *k'ob* term on this Copan altar and on the Yaxchilan steps by adding the interior syllable */-jo-/* :

Copan Str.30 Altar 19469 (A1-A6):**u-JEL k'o-jo-ba u ya-k'u CHAAK-ki . . .**

Yaxchilan Stairway V Step 16 (block 81): . . . **k'o-jo-ba-li ye-TE'-je u-chaan ta-ja-mo'-o? aj-15-ba-ki k'uhul-“YAX EG?”-[AJAW] KALOM-TE'**

These two cases spell the term with the interior */-jo-/* syllable indicating that the word may be under-spelled in other cases when written as **k'o-ba**. The Copan example is especially telling since it occurs in phrase that uses the same verb *jel* collocation as in the

era day expression by recording “the next *k’ojob* (of) *uyak’u chaak*”¹⁹². The item possessed by *uyak’u chaak* is the *k’ojob* or the round flat-topped altar itself on which the inscription is written. In the Yaxchilan example above the possessor of the *k’ojobil* is the Itzamnaj Balam III the “guardian” and captor of Torch Macaw¹⁹³. So, the question arises: What is the meaning of *k’ojob*? Does the term name a particular flat-topped stone or a hearth stone? The full spelling of the term as **k’o-jo-ba** argues against the previous derivation as **k’o-ba** and a classification as a hearthstone.

One more example of the term *k’ob* comes from the site of Joyanca (Figure AV.3) where it is part of a standard dedicatory phrase for another small circular altar (very similar in shape and size to the previous Copan altar) from Structure 6E-12 thought to be used as an *incensario* stand (Formé 2006:06). David Stuart transcribed the glyph blocks A2-C1 as: **T’AB’AY u-k’o-b’a TUN-ni-li?** (Formé 2006:06) Like on the Copan altar, the item indicated by the **k’o-ba** spelling is the circular altar that is being dedicated. The Joyanca stone, with its flat top is ideal for an effigy stand. It is difficult to ascertain given the present evidence, if the *k’ojob* refers to the altar/pedestal stone itself, or to the effigy/god it supports, or the altar/pedestal stone and the effigy/god together (p.c. Barbara Macleod 2011). Based on the current evidence stated, the proper spelling of the term is **k’o-jo-ba** for *k’ojob* and may translate as a flat-topped, circular stone altar.

In a counter opinion, David Stuart (2011a:216-219) interprets the term under consideration as not *k’ojob* but *k’oj* meaning “image”, “mask” or “face” with the /-ba/ suffix attached at the end of *k’oj* root serving apparently as an instrumental suffix¹⁹⁴ or as a suffix to the word *baah*. The new glyphic phrase reads something like *jelaj k’oj baah* for “the face-image changed” (Stuart 2011a:219)¹⁹⁵ with *k’oj* being in this case “image.” Stuart offers the following:

¹⁹² The presence of the /u-/ prefix attached to the term *jel* derives a type of “change” similar to the word “next” where the subject is coming immediately after a previous change (p.c. Barbara MacLeod 2012).

¹⁹³ The mention of the *k’ojobil* on Yaxchilan Hieroglyphic stair, block 81 is in conjunction with a possible capture event (block 72) on the day 9.18.6.5.11 7 *Chuen* 19 *K’ayab* (blocks 70-71) and a date that is also shared on Yaxchilan Stela 5 (p.c. Peter Mathews 2012).

¹⁹⁴ Normally, Ch’olan languages attach an instrumental suffix to an intransitivized verbal root in order to derive a noun that indicates the instrument used to perform or achieve the action indicated by the verb (p.c. Sven Gronemeyer 2011). Schumann Gálvez gives the following definition in his 1997 Mopán grammar: “. . . se coloca después de una raíz verbal para señalar instrumento que se usa o sirve para ejecutar aquello que la raíz verbal indica” (Schumann Gálvez 1997:82). As to how an instrumental suffix applies the root of a noun like *k’oj* is difficult at present to ascertain, but Yucatec for example also allows a derivation from a nominal base.

¹⁹⁵ Interestingly Stuart’s reading of *k’oj* as “image” reflects back to a similar era day reading made by Linda Schele concerning the Kerr 6593 Panel. As Schele (1992:123) states, the key word “in the era expression is *k’oh*, *k’ohba* or *kohob*, all meaning ‘image’ or statue. Also she thought that “*Ilahi yax k’oh*” translated as

Perhaps the word *k'oj* refers to masks, images, or faces that should be equated in some manner with the three sacred stones dedicated on that day by the gods. I suggest this as a possibility because we've long known that the three stone heads or masks along a celestial band comprise an important cosmological symbol for the Classic Maya, most often manifested as small portrait heads attached to "sky belts" worn by Maya kings as part of the ceremonial costume for period-ending rituals. The "change of masks" might then, refer to the idea of the cosmos getting a new identity of some type—a makeover of sorts—which in turn became symbolically reflected in the ritual dress of Maya Kings, and especially in their cosmic belts (Stuart 2011a:12).

The new Stuart hypothesis is difficult to adopt in the face of such a strong correspondence between the object named in the dedicatory passage on the altars/pedestal stones from Joyanca and Copan. Hopefully in the future, additional texts using the *k'ojob* term will be discovered and help clarify its essential meaning and semantic domain.

"was seen, the image or statue", and that "hal kohba" meant "appeared the image or statue" (Schele 1992:123; Freidel et al. 1993:65-66). Schele believed that the "image" referred to was a great earth turtle from whose cracked carapace the Maize God emerges (see K1892). Stuart (March 2011b) recently nullified Schele's interpretation on K6593 Panel on the grounds of a faulty verb derivation and a misidentification of a historical ruler named *yax k'oj ahk chak k'u-? Ajaw* (Stuart 2011b). However he does not challenge Schele's original assertion that the *k'oj* term spelled on Kerr Panel 6593 simply **k'o-jo** without the /-ba/ suffix.



Figure AV.1: Cast of Copan Altar 19469 (photo by Carl Callaway 2010).

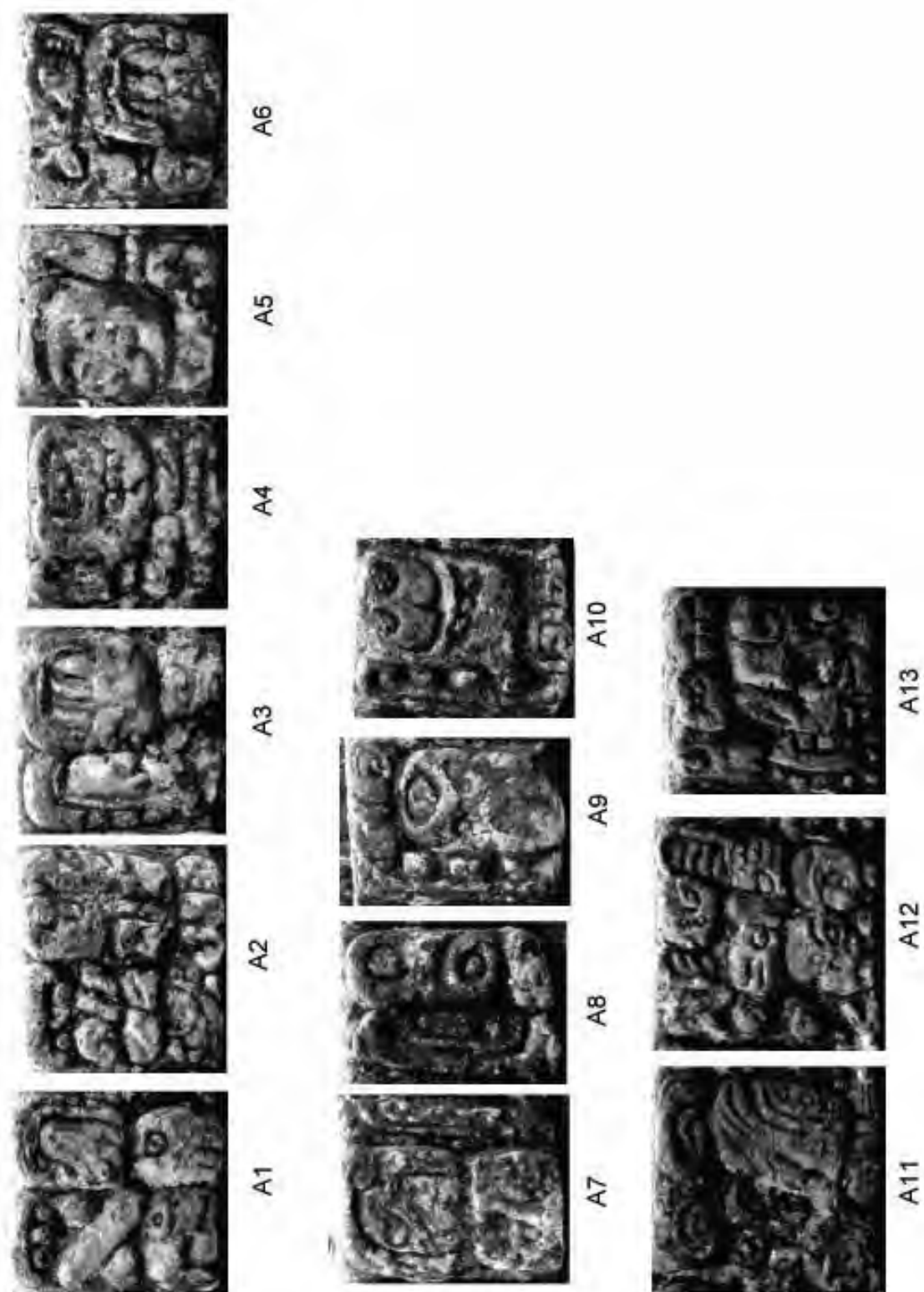


Figure AV.2: Rim text of Copan Altar 19469 cast (photos By Carl Callaway 2010).

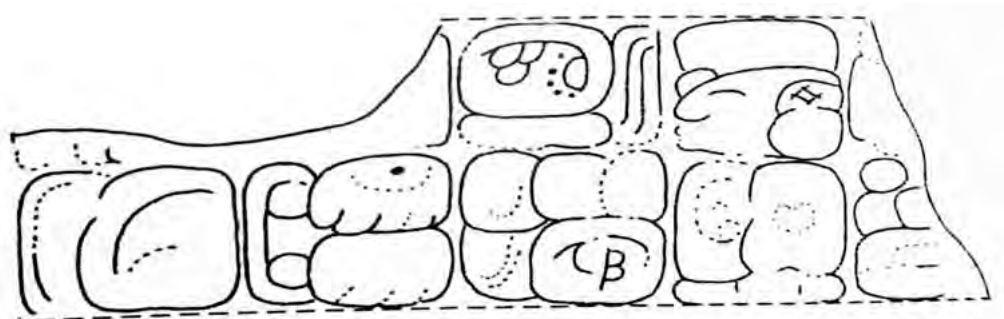


Figure AV.3: Joyanca Altar (drawing by David Stuart).

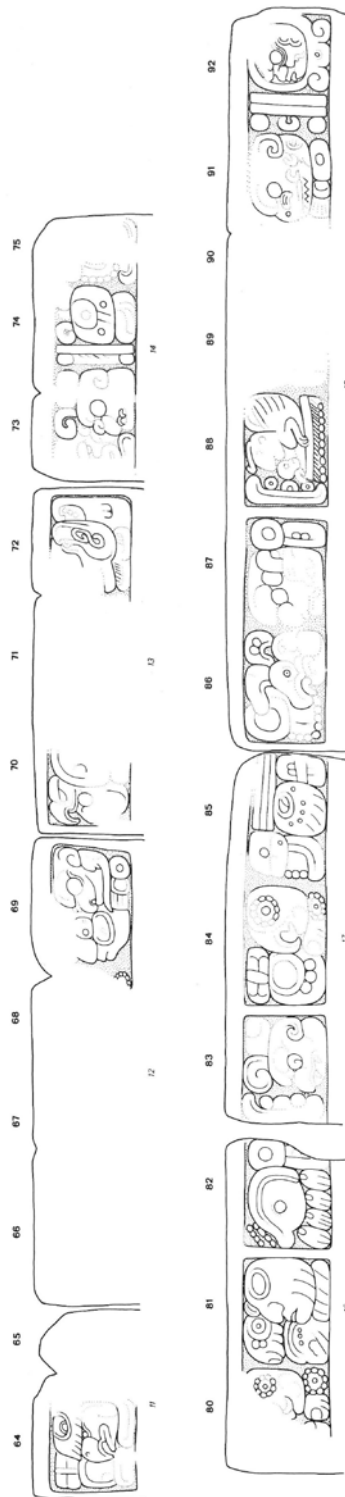


Figure AV.4: Yaxchilan Stairway V, Step 15 and 16 (blocks 64-92) (drawing by Ian Graham).

Appendix VI

A Preliminary Analysis of Names for the Higher Periods of the Long Count

The higher periods above the *bak'tun* cycle are a scarce set of signs in Maya script. As each period increases in value, their respective glyphs become even rarer. The scarcity is partly due to the fact that such mathematically huge numbers were not necessary to calculate a normal Long Count pertaining to current “era” that fell within a span of 5125 years (13 *bak'tun* periods). Where large periods above a *bak'tun* and *piktun* do come into play, are in texts that record deep time events occurring in primordial time beyond 19 *piktuns*. There are just a handful of known monuments that record one or more periods higher than a *piktun*, these include: Coba Stela 1, 5, and 28; Yaxchilan Structure 33, Step 7; Quirigua Stela A, D, E, and F; Copan Stela N, 12 and Temple 26 Hieroglyphic Stairway; Palenque Temple 14 and the House E Painted Text; Tikal Stela 10; Tortuguero Monument 6; the Stone of Chiapa; and the so-called Birth Vase (Kerr 5113).

Before taking a detailed look at the higher period glyphs, let us look at a list of corresponding values (in days) of all Long Count periods. Each period is assigned its “order” in relation to the first cycle of the count— the *k'ins* (by “order” I mean ascending levels of increasing magnitude). There are 24 known orders in all:

24 th Order	1-24 th Order	754,974,720,000,000,000,000,000,000
23 rd Order	1-23 rd Order	37,748,736,000,000,000,000,000,000,000
22 nd Order	1-22 nd Order	1,887,436,800,000,000,000,000,000,000
21 st Order	1-21 st Order	94,371,840,000,000,000,000,000,000
20 th Order	1-20 th Order	4,718,592,000,000,000,000,000,000
19 th Order	1-19 th Order	235,929,600,000,000,000,000,000
18 th Order	1-18 th Order	11,796,480,000,000,000,000,000
17 th Order	1-17 th Order	589,824,000,000,000,000,000
16 th Order	1-16 th Order	29,491,200,000,000,000,000
15 th Order	1-15 th Order	1,474,560,000,000,000,000
14 th Order	1-14 th Order	73,728,000,000,000,000
13 th Order	1-13 th Order	3,686,400,000,000,000
12 th Order	1-12 th Order	184,320,000,000,000
11 th Order	1-11 th Order	9,216,000,000,000
10 th Order	1-HABLATUN	460,800,000,000
9 th Order	1-ALAWTUN	23,040,000,000

8 th Order	1-KINCHILTUN	1,152,000,000
7 th Order	1-KALABTUN	57,600,000
6 th Order	1-PIKTUN	2,880,000
5 th Order	1-BAK'TUN	144,000
4 th Order	1-K'ATUN	7,200
3 rd Order	1-TUN	360
2 nd Order	1-WINIK	20
1 st Order	1-K'IN	1

Each of these orders “turn over” to one unit of the next higher order when twenty units of the lower order are reached (with the exception of the *winal* which needs to only accumulate up to 18 units). So, twenty *tun* make one *k'atun* and twenty *k'atun* make one *bak'tun*, and twenty *bak'tun* make one *piktun* and so forth. At its very heart the entire system can be thought of as a vigesimal count based on the *tun* with the *winal* and the *k'in* being fractions of this 360 day *tun* period (Thompson 1971:148). The smallest single order is 1 *k'in* (one day) while the largest single 24th order is 754,974,720,000,000,000,000,000 days (754 octillion 974 septillion 720 sextillion days) or approximately 2,067,052,200,000,000,000,000,000 tropical years. By comparison, modern science places the age of our universe at about 15 billion years whose numbered equivalent is 15,000,000,000.

To put things in a more human cosmic perspective, a single 11th Order Period eclipses the age of our universe by nearly a factor of two. In fact, within a single count of the 24th order one can fit 53,768,773,000,000,000 of our own cosmic ages (at 15 billion years an age). Even more staggering is that on Coba Stela 1, the 24th Order counts not to one but to thirteen units. Such massive numbers no doubt were meant to conceptualize the infinite time spans inherent in creation (Thompson 1971:316; Schele and Freidel 1990:430).

The derivation of names for the higher periods above a *winik* are fabricated pseudo-Maya terms (Morley 1937-1938:313-320) taken from Colonial dictionaries and are not true pronunciations; early scholars were at a loss on what to call these gargantuan cycles so they named them by prefixing the terms in Yucatec Maya for 400, 8,000, 160,000 and 3200,000 to the word *tun* “on the logical assumption that the [previous name for] *katun* is a contraction of *kaltun* and that its multiples are formed in the same manner” (Thompson 1971:147). Thompson and Morley before him consulted a treatise

on counting stated in Beltran's (1859:195-208) Yucatec dictionary and contrived the following titles¹⁹⁶:

10 th Order	HABLATUN	(hablat = 1,280,000,000 <i>tun</i>)
9 th Order	ALAWTUN	(alaw = 64,000,000 <i>tun</i>)
8 th Order	KINCHILTUN	(kinchil = 3,200,000 <i>tun</i>)
7 th Order	KALABTUN	(kalab = 160,000 <i>tun</i>)
6 th Order	PIKTUN	(pik = 8000 <i>tun</i>)
5 th Order	BAK'TUN	(bak = 400 <i>tun</i>)

Of course, these early scholars could only make analogies from what they drew from Colonial documents and dictionaries. With the decipherment of the script, comes a new understanding of the potential Classic derivations for each of these orders and tentative readings can be considered.

Decoding Names for the Higher Periods

Currently in the field of epigraphy, there is general consensus as to the Classic Period pronunciations for the first four orders of periods (*k'in*, *winik*, *haab*, *winik haab*). Definitions for each term exist in many hieroglyphic dictionaries (Boot 2009d; Montgomery 2006; B     and Mathews 2011). The Boot (2009a) dictionary database is especially helpful since it records suffixation for each term and specifies where the text is found. Therefore, a detailed description of the derivation of the first four orders is not needed. Yet, since several names for the higher orders are partially fashioned from signs taken from the lower orders, a general description is offered. Each of these periods have "normal" and "head-variant" forms for their respective glyphs. The normal forms often carry phonetic suffixation that aids in the pronunciation of the term. Here one must proceed with great caution since the superfixes above the main signs may not have been intended to be read (as in the case of the *k'atun* period with its probable reading as *winik haab*). Superfixes above the main sign may have intended to be read as a single sign. But for the sake of this study, I will argue that the respective superfixes do hold phonetic values for the pronunciation of each sign.

¹⁹⁶ The HABLATUN is the exception in this group. Spinden (1969:8-9) seems to have invented the term for the 10th Order.

The 1st Order as K'IN

The 1st Order *k'in* is named after the sun (Thompson 1971:143), a count of suns/days is the very basis of the Long Count. The **K'IN** logograph is the portrait of the sun often represented by a four lobed flower. It frequently carries a /-**ni**/ suffix reinforcing the final /-**n**/ consonant. The *k'in* term is widespread in Maya languages to denote words for sun, day, and time.

The 2nd Order WINIK/WINAK

(Winal)

The 2nd Order *winik* or *winak* is the name for the numeral twenty with the assumption it derives from the general term for man who counts using twenty digits (Thompson 1970). It occurs with both a /**wi**-/ prefix and a /-**ki**/ suffix. A full spelling as **wi-ni-ki**, appears at Chichen Itza's Casa Colorada, hieroglyphic band 37 (Boot 2009a:201)¹⁹⁷. The *winik* reading is also reinforced by abundant glosses across a wide spectrum of Maya languages that employ the word to describe the number twenty.

The 3rd Order as HAAB

(Tun)

The 3rd Order has for its main sign is T548 **HAAB** logograph and is linked to the 360 day period. The *haab* reading is complemented by an occasional /-**bi**/ suffixation reinforcing the final /**b**/ consonant. A good instance of the **HAAB-bi** spelling is found on Caracol Stela 6 (C10) where it is written **5-HAAB-bi-ya lajun haabiy** for "five years" (Boot 2009a:66). *Haab* is a word widespread across Maya languages in connection for names of the 360 day solar year.

The 4th Order as WINIK/WINAK HAAB

(K'atun)

The 4th Order Period main sign is the T548 **HAAB** sign superfixed by a T528 **TUN** sign "bracketed" by two T25 /**ka**-/ signs. Often the entire collocation is prefixed by a T117 /**wi**-/ syllable that signals the word **WINIK/WINAK**. Altogether then, the 4th Order Period sign reads **WINIK/WINAK HAAB** for "twenty *haabs*" yet this reading

¹⁹⁷ Although this derivation seems clear, the site of Chichen Itza is located in a Yucatec speaking area. Many spellings lead to Yucatecan words and as such these can not be taken as representative of Classic epigraphic Maya (p.c. Erik Boot 2011).

still needs additional support and is far from secure. The 4th order numeric value is 20 x 360 days.

The 5th Order as PIK

(Bak'tun)

The 5th Order Period main sign is the T528 **PIK** sign that syllabically reads /**pi-**/. The sign as a logograph carries a /-**ki**/ suffix reinforcing the final /-**k**/ consonant. Spellings of the **T528** logograph as **pi-ki** are found at Caracol, Copan (Stuart 2005b:166) and “Tila”; the Caracol example is on a Ballcourt marker 4, block A1 (Boot 2009a:149) while the Tila example is on Stela A, block A6 (Beyer 1927:124, fig. 1). Stuart (2005b:166) points out that **PIK** is glossed in Maya languages as a term for 8,000 and he noticed that the T528 glyph was commonly employed to label bundles of cacao beans brought as tribute before a royal court. A depiction of such a usage is on Kerr vessel K5453 with **OX PIK** as 24,000 and Bonampak Structure 1, Room 1, Caption 18, **JO' PIK** as 40,000 (Stuart 2006b; Boot 2009a:149). Yet **PIK** is also general term for a great multitude of things such as in the thousands (Barrera Vásquez 1980:653). In the case if the 5th Order it is referring to its great multitude of days (144,000) and is equal to 400 rounds of 360 days.

6th Order Period as T'AN PIK

(Piktun)

Locations: (Note: The 6th Order Period is abundantly represented so only a few of its appearances will be given below)

Coba Stela 1 (N10)

Coba Stela 5 (Q10)

Coba Stela 28 (A12)

Copan Stela 12 (G14)

Palenque House E Painted Text (pC1 and pL1)

Palenque Temple 14 (D1)

Palenque Temple of the Ins. West Tablet (F11)

Quirigua Stela F east (C6b)

Tikal Stela 10 (AB9)

Yaxchilan Structure 33 Step VII (L2)

The Stone of Chiapa (A3)

Birth Vase (Kerr 5113)



Figure VI.1: Figure a. Palenque House E Painted Text, block pC1 (drawing by Hermann Beyer); Figure b. Palenque Temple of the Ins. West Tablet, F11 (drawing by Linda Schele courtesy of David Schele); Figure c. Quirigua Stela F east, block C6b (drawing by Matthew Loooper); Figure d. Yaxchilan Structure 33 Step VII, block L2 (drawing by John Montgomery).

The main sign of the 6th Order Period is the same as the T528 PIK sign of the previous 5th Order. A viable reading for the 6th Order period then centers on the decipherment of its T42 superfix. As Gronemeyer and MacLeod (2010:50, note 52) point out, the T42 sign serves in other instances as the emblem glyph for El Chorro, and it also occurs within titles on vases (e.g. K534, K1399); it often carries a /-ni/ suffix and in the case of El Chorro /-ni-la/ and /-a/. After an intensive look at the T42 superfix throughout the corpus (especially its use on Tortuguero Monument 6), MacLeod and Gronemeyer proposed a value of T'AN relating to “word”; in the case of the 6th Order Period sign it is used in rebus fashion for *t'an* meaning “big, fat thick” (Barrera Vásquez 1980:833-834); other expressions in Yucatec (Barrera Vásquez 1980:833- 834) include *t'an lu'um* “*todo tierra*” (all soil) *t'an bak'* “*todo carne sin hueso*” (all meat, no bone), *t'an bak'* “*hueso macizo*” (dense or massive bone) (Gronemeyer and MacLeod 2010:50). The rebus reading fits nicely with the idea that the 6th Order Period is a *t'an pik* meaning a “big/thick/massive pik” (Gronemeyer and MacLeod 2010:50). Its numeral equivalent is 8000 *haab* (8000 x 360).

As for the terminology for the 6th Order and even higher order, very little evidence exists. This is partly due to not only the rarity of the signs. For those few full “Grand Long Counts” displaying all 24 Orders (such as on Coba Stela 1, 5 and 28), extensive weathering of the texts make a detailed reading impossible. There are however scant phonetic clues on several of the higher periods that offer a chance for some tentative readings. The superfixes hold glyphs with known syllabic and logographic values. The question is, are these various superfixes meant to be read as distinct words, or are they attached to the main sign to form a completely different word (as in the case of the

superfix on the 4th Order Period **WINIK HAAB**)? This study takes the tentative view that the superfixes are meant to be read. So, let us review each term and see if it is possible to transcribe the various elements.

7th Order Period as TZUTZ PIK

(Kalabtun)

Locations: Coba Stela 1 (M10)
 Coba Stela 5 (P10)
 Coba Stela 28 (B11)
 Copan Stela 12 (H14)
 Copan Stela C north (A1)
 Copan Stela C south (A1)
 Palenque House E Painted Text (pB2 and pM1)
 Palenque Temple 14 Main Panel (C2)
 Palenque Temple Ins. West Tablet (E12)
 Tikal Stela 10 (A8-B8)
 Yaxchilan Structure 33 Step VII (K2)
 The Stone of Chiapa (B3)
 Birth Vase (Kerr 5113)
 Tortuguero Mon. 6 (L11)

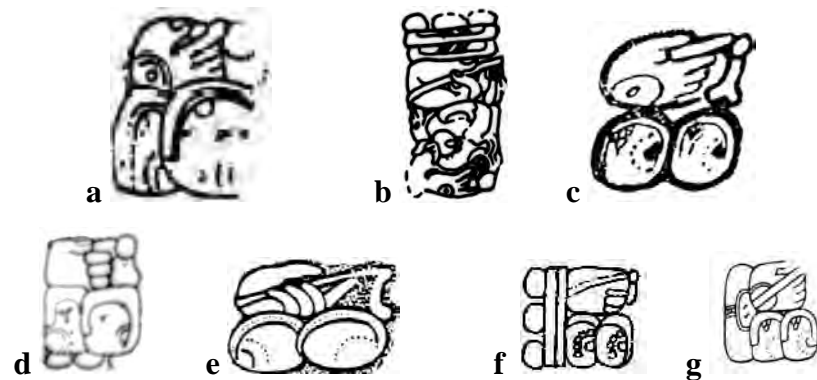


Figure VI.2: Figure a. Copan Stela 12, block H14 (drawing by Linda Schele courtesy of David Schele); Figure b. Copan Stela C south, block A1 (drawing by Linda Schele courtesy of David Schele); Figure c. Palenque House E Painted Text, block pM1 (drawing by Hermann Beyer); Figure d. Palenque Temple Ins. West Tablet, block E12 (drawing by Linda Schele courtesy of David Schele); Figure e. Tikal Stela 10, block AB8; Figure f. Yaxchilan Structure 33 Step VII, block K2 (drawing by John Montgomery); Figure g. Tortuguero Mon. 6, block L11 (drawing by Ian Graham).

The 7th Order Period carries again the T528 **PIK** logograph as its main sign. Fortunately, its superfix carries the well-known T218 **TZUTZ** logograph first deciphered by David Stuart (2001:11). The sign is a portrait of the left hand holding a pin-like “bauble” with a tassel attached. As to what the T217 logograph depicts, Robert Wald relates the following:

“. . . pictorially, the ‘bauble’ represents a ‘weaving pin or bodkin’ Although not explicitly mentioned by them, there is extremely good linguistic evidence that they are right. In Modern Tzotzil (Laughlin 1975:97-97) *tzutzob*’ is a ‘small bobbin, ‘*tzutzub*’ is a ‘bodkin,’ and *tzutzav* refers to ‘the end of cloth or loom.’ So what is pictured is probably a hand tying or looping the thread on the end of an item after it has been woven similar to the way tassels are tied at the ends of a scarf” Wald (2007:279-280).

The **TZUTZ** logograph is commonly used to signify the close or termination of a Period Ending like the one involving the 13th *pik* used frequently in conjunction with era day events (e.g. *tzutzuy 13 pik*). Taking all the above factors into account, The 7th Order Period reads **TZUTZ PIK** for “finished *pik*.” Perhaps the idea expressed here is that the count of *piks* (400 *haab*) is becoming too unwieldy mathematically, and a larger base factor is needed— but this is only a speculation.

Another possibility is that as with the previous 6th Order, the superfix is being used in rebus fashion. Yucatec has the homophonous root *tzutz* as signifying something that is swollen such as with an inflamed throat *tzutz k’o’och* (Barrera Vasquez 1993:868). This description is complementary to what is observed in the previous 6th Order where the *t’an pik* is stated as growing thicker or denser. Mathematically speaking, one can see how a single value for the 7th Order Period has now “swelled” to over two million (2,080,000) *haabs*!

8th Order Period as NUK TSUTS PIK AJAW (Kinchiltun)

Locations: Coba Stela 1 (N9)
 Coba Stela 5 (Q9)
 Coba Stela 28 (A11)
 Quirigua Stela F east (D6a)
 Quirigua Stela D east (C20a)
 Tikal Stela 10 (A7-B7)

Yaxchilan Structure 33 Step VII (L1)

The Stone of Chiapa, backside (A4)

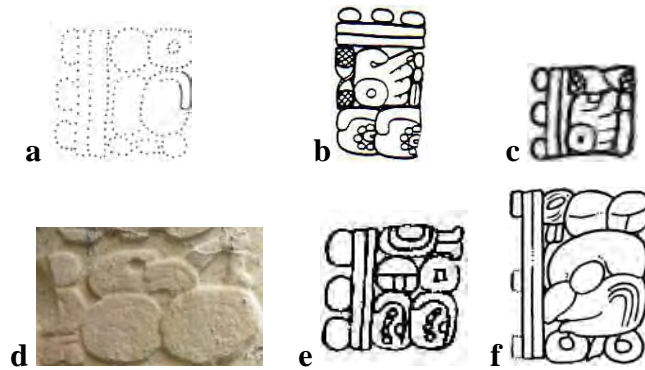


Figure VI.3: Figure a. Coba Stela 1, block N9 (drawing by Carl Callaway); Figure b. Quirigua Stela F east, block D6a (drawing by MatthewLooper); Figure c. Quirigua Stela D east, block C20a (drawing by MatthewLooper); Figure d. Tikal Stela 10, block A7-B7 (photo Carl Callaway); Figure e. Yaxchilan Structure 33 Step VII, block L1 (drawing by John Montgomery); Figure f. the Stone of Chiapa, backside, block A4 (drawing by Christian Prager).

The 8th order Period has a main sign that uses again the T528 **PIK** glyph. It can possess three different suffixes in the superfix. The first is a prefix has two variations: the T106 /**nu-**/ and T151 /**nu-**/ syllable. The latter T151 sign is also a logograph for the word *nuk* meaning “great, large or wide” (Montgomery 2006:188). The second superfix is the same T218 **TZUTZ** logograph as seen in the previous 7th Order. The third superfix is the well-known T168 **AJAW** logograph. Altogether then, the collocation may read: **nu-TZUTZ PIK AJAW** or **NUK TZUTZ PIK AJAW** with the latter reading as “great/large swelled *pik* lord.” The value of a single 7th Order Period has now “swelled” to over a billion days (1,152,000,000 days to be exact or 41,600,000 **HAAB**). Being that this is the final instance when the **PIK** glyph is employed as a main sign (higher periods above the 8th order revert to back to the **HAAB** as their central glyph). Perhaps the 8th order **PIK** is “lord of lords” over the preceding the **PIK** values.

9th Order as K’AN HAAB NAL

(Alawtun)

Locations: Coba Stela 1 (M9; Stela 5, P9)
 Stela 28 (B10)
 Coba Stela 5 (P9)
 Stela 28 (B10)

Quirigua Stela F east side (D3?)

Yaxchilan Structure 33 Step VII (K1)

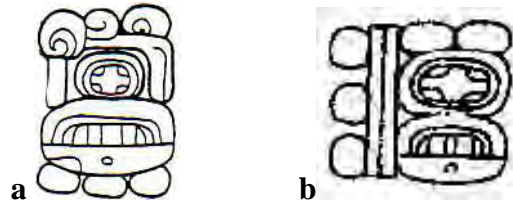


Figure VI.4: Figure a. Quirigua Stela F east side, block D3 (drawing by Matthew Looper); Figure b. Yaxchilan Structure 33 Step VII, block K1 (drawing by John Montgomery).

The 9th Order returns to the T584 **HAAB** sign for its main sign. It carries a T281 **K'AN** superfix (meaning yellow/ripe/precious) that is topped by a T86 **NAL** glyph, a locative determinative suffix meaning “place.” Another possible occurrence of the 9th Order Period is on Quirigua Stela F east side (D3), yet here it carries a numeral five for a prefix and therefore may refer to another cycle altogether. A straightforward reading of the entire collocation is **K'AN HAAB NAL** for “yellow/ripe/precious *haab* place.” In this instance a higher period order is reflecting a place name somewhere within the landscape of time. Perhaps in this case, **K'AN** refers to a sense of “ripeness” as with maturity and relates that the **HAAB** cycle has now matured to a very large size (832,000,000 **HAAB**) and out-growing any previous **PIK** or **HAAB** cycle.

10th Order as MIH HAAB NAL (Hablatun)

Locations: Coba Stela 1 (N8)
 Coba Stela 5 (Q8)
 Coba Stela 28 (A11)
 Quirigua Stela F east side (C4)
 Yaxchilan Structure 33 Step VII (J2)

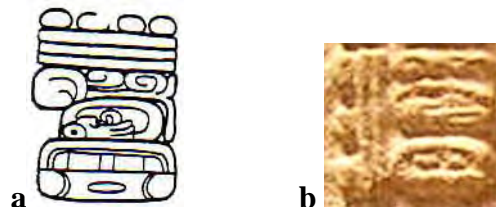


Figure VI.5: Figure a. Quirigua Stela F east side, block C4 (drawing by Matthew Looper); Figure b. Yaxchilan Structure 33 Step VII, block J2 (photo by Jami Dwyer and digitally enhanced by Paul Johnson).

The 10th Order retains for its main sign the T584 **HAAB** logograph. It carries as a superfix or as an infix the T217v “shell-in-hand” sign that is a well known glyph **MIH** that denotes the numerical value of zero or the negative marker “no.” The **MIH** superfix is surmounted by the T86 **NAL** a locative suffix meaning “place.” Altogether the collocation reads **MIH HAAB NAL** for “zero/nothing *haab* place.” Here again a time period is named after a place within the temporal landscape.

11th Order as NAJ HAAB?

Locations: Coba Stela 1 (M8)
 Coba Stela 5 (P8)
 Coba Stela 28 (B9)
 Yaxchilan Structure 33 Step VII (I2)



Figure VI.6: Figure a. Coba Stela 1, block M8 (drawing by Carl Callaway); Figure b. Yaxchilan Structure 33 Step VII, block I2 (drawing by John Montgomery); Figure c. Yaxchilan Structure 33 Step VII, block I2 (photo by Jami Dwyer).

The 11th Order Period sign is quite rare with only two legible occurrences found on Coba Stela 1 and Yaxchilan Step IV with the latter being the most preserved. Its main sign is the T584 **HAAB** logograph superfixed by what seems to be a version of the T1000a **NAJ** head that is a profile of a female face with face markings on the cheek that look like letters “**IL**”; these markings are associated with a youthful countenance and are displayed by the Maize, Wind and Moon Gods (Stone and Zender 2010:35). At times the head can denote the words **NAJ** for “first or mother.” The T1000a head also resembles the **IXIK** logograph used to introduce a female’s name. Without additional examples it is difficult to assign a tentative reading to the 11th Order Period.

12th Order ? HAAB

Locations: Coba Stela 1 (N7)
 Coba Stela 5 (Q7)
 Coba Stela 28 (A9)
 Yaxchilan Structure 33 Step VII (J1)

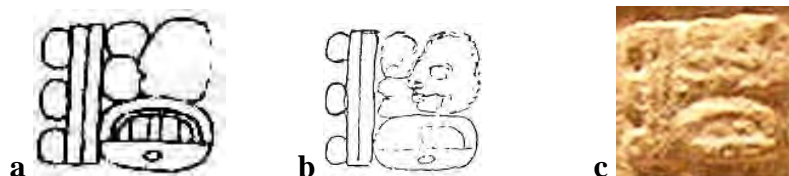


Figure VI.7: Figure a. Yaxchilan Structure 33 Step VII, J1 (drawing by John Montgomery); Figure b. Yaxchilan Structure 33 Step VII, block J1 (field drawing by Ian Graham); Figure c. Yaxchilan Structure 33 Step VII, block J1 (photo by Jami Dwyer).

The 13th Order Period has as its main glyph the T584 **HAAB** logograph. It carries a superfix of what might be the profile of a human head. The clearest representation of this period is in on Yaxchilan Structure 33 Step VII, (J1). Unfortunately block J1 is too weathered to reveal any diagnostic features of the superfix although it does seem to carry a prefix of some sort. Lacking sufficient evidence, no reading can be made at this time.

13th Order as “Waterlily God” HAAB

Locations: Coba Stela 1 (M.7)
 Coba Stela 5 (P7)
 Coba Stela 28 (A9)
 Yaxchilan Structure 33 Step VII (I1)
 Quirigua Stela A, west (D1?)



Figure VI.8: Figure a. Yaxchilan Structure 33 Step VII, block I1 (drawing by John Montgomery); Figure b; Figure d3. Yaxchilan Structure 33 Step VII, block I1 (photo by Jami Dwyer); Figure c. Quirigua Stela A, west, block D1 (drawing by Matthew Looper).

The 13th Order Period has as its main glyph the T584 **HAAB** logograph. It is superfixed by a zoomorphic T1031a head of what may be the “Water Lily God” (an animated river) that carries on its forehead an infixed T501v **HA’** water sign (Yaxchilan Structure 33 Step VII, I1). This god serves at times as the head variant of the 4th Order **WINIK HAAB** (*k’atun*) glyph standing for units of 7,200 days. On another occurrence, this same T1031a head is infixed with a T585 /**bi-**/ sign (see Quirigua Stela A, west, D1). These two examples are the only two legible portraits of the 13th Order Period in the context of the Long Count. Although there is one more intriguing portrait of the T1031

head on Copan Stela J (north side, block B6) that is outside the main context of a Long Count. On Stela J the T1031 head is part of a title naming a **6 HAAB** cycle and is referred to as **K'AL PIK "T1031/WATER LILY GOD."** Taken numerically the entire name may read **K'AL PIK WINIK HAAB** with all three terms representing a sum of $20 \times 144,000 \times 7,200$ days equaling 2.0736×10^{10} days. The equivalent sum can be expressed also as the numbers $8,000 \times 360 \times 7,200$ days with each of these numerical values reflective of **PIK**, **HAAB** and **WINIK HAAB** glyphs associated with the "Water Lily" God nomen on Copan Stela J and in the 12th Order Period sign. Such values in turn, may reflect that the T1031a head with the **HA'** infix might also be representative of a number that serves a numerical factor within the 13th Order count.

The 14th Order as ?-HAAB

Location: Coba Stela 1 (N5)

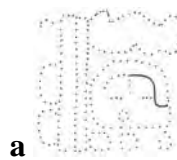


Figure VI.9: Figure a. Coba Stela 1, block N5 (drawing by Carl Callaway).

The 14th Order Period has as its main glyph the T584 **HAAB** logograph. There is just enough detail from the Thompson photos (Thompson et al. 1932) of the Coba Stela 1 text to suggest that it holds a superfix very similar to the T510af **EK'** "star" glyph, or perhaps the T155 glyph is also a superfix carried by the **KUMK'U** month sign that has tentatively been translated as **BIX** (Gronemeyer and MacLeod 2010:49). Yet without further examples, a tentative reading can not be offered.

Photos of the "Grand Long Count" periods beyond the 14th Order (those of Coba Stela 1, 5 and 28) show only fragmented tracings and shadowed outlines. Yet, it is apparent that the many of these higher period cycles above the 14th order hold the T584 **HAAB** glyph as their main emblem (e.g. the 15th, 16th and 17th Orders), reinforcing Thompson's (1971:148) assertion that the Long Count is very much a vigesimal count based on the 360 day **HAAB**.

Enigmatic Time Periods

Location: Quirigua Stela A, west (D1)
 Quirigua Stela E, East (D12b)
 Quirigua Stela E (D15b)
Dresden Codex page 61 (A16)

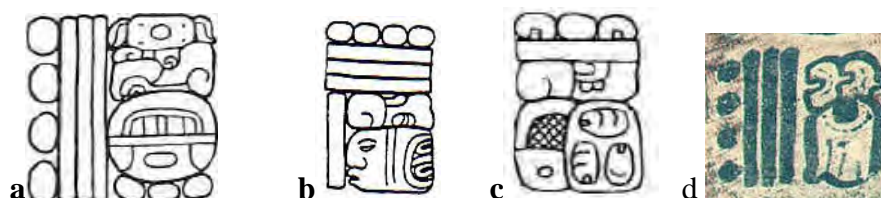


Figure VI.10: Figure a. Quirigua Stela A, west, block D1; Figure b. Quirigua Stela E, east, block D12b; Figure c. Quirigua Stela E, block D15b (drawings a-c by Matthew Looper); Figure d. *Dresden Codex* page 61, Column A, block A16 (photo after Förstemann 1880 courtesy of FAMSI).

Several periods of unknown value occur on Quirigua's Stela A and E as massive Distance Numbers calculating into deep time (Indrikis 1997; Looper 2003:150 and 165). As mentioned, the Stela A example is similar to the 13th Order Period but differs in that the T1031a head of the "Water Lily God" is infixed with a T585 /bi-/ sign. On Stela E, east (block, D12b) the main sign is a human head, wrapped possibly with a cord and inset at the back of the head is the **AK'AB** sign indicating that it is from a dark realm. It is prefixed by the numeral five and carries a T86 **NAL** superfix. The second example from Stela E is most intriguing since it is similar to a name for a super natural locale known as the **IK' NAB NAL** mentioned on the Cosmic Plate (Kerr 1609) and is used to label the surface of a watery world from which the God *Chaak* emerges (Stuart et al. 1994:74; Looper 1995a:97-99; Indrikis 1997:109). The period holds as its main sign a **NAB** glyph that is inset with three "bean-shaped ovals"; it is prefixed by a T89 **IHK'** glyph and carries a T86 **NAL** superfix; the entire collocation is preceded by the number six giving a possible reading **WAK IHK' NAB NAL** for "six black water/sea place." Finally as a tentative proposal, there is an example of a possible higher order period from *Dresden Codex* Page 61, block A15 that seemingly counts to the Serpent Number base date of 19.19.19.16.3.16.14.11.4 9 *K'an* 12 *K'ayab* (a date existing over 34 thousand years into the past; Beyer 1943). The collocation reads **19 OCH HA'** for "19 enters water." As a sacred domain this time period is found on: *Dresden Codex* page 33, Section b, page 34, Section b and page 35 Section b. It is the number nineteen submerged in a watery pool encircled by a looped serpent from whose jaws the god *Chaak* emerges. Hopefully as

additional examples of the higher period orders come to light, all these enigmatic time periods will be given their proper numerical value and place within the sequence of the “Grand Long Count.”

Concluding Thoughts

This exercise in tentatively naming the higher periods above the 6th Order has met with varying results. The 6th through 8th Orders seem to possess names that indicated their increasing magnitude and describe a count of *pik* as “thick”, “swelled”, and “greatly swelled.” The 9th and 10th orders with a **NAL** suffix are reflecting sacred place names within the temporal landscape. This is especially true for the enigmatic time period **WAK EK’ NAB NAL** that also describes a specific mythical locale illustrated on the Cosmic Plate (Kerr 1609). This may relate to a conception that the different levels of periods were equated with specific levels of celestial and earthly stratum. The 5th Order **PIK** logograph is just such a case. Its sign variants as the **PIK** sign, the **CHAN** “sky” sign and the head of the **CHAN** bird are standard variants of the 5th Order Period (Thompson 1971:figs. 26-29). The **CHAN** Bird and its body are often represented in Maya iconography as a celestial band demarking a heavenly realm. This indicates that the **CHAN** bird inhabits a specific celestial stratum and by direct substitution so does the 5th Order higher period **PIK**. Finally the 10th and 13th Orders indicate that the higher orders may derive their names from specific gods who represent numeric values. In the case of the 13th Order, the period may be named after the “Water Lily God” a variant of the 4th Order sign that holds a base value of 7,200 days. Gods as deified numbers do not seem out of place when compared to other anthropomorphic and zoomorphic variants of Maya numbers who also represent numerical values (e.g. the number eight is the Maize god and the number ten is the Death god; Thompson 1971:12). The higher orders as gods and sacred places living in the fabric of time and space brings mathematics into a much more tangible equation where numbers can be not only be calculated but prayed to, revered as deities and the landscapes they inhabit charted. As Spinden (1969:33) astutely noted, these rising levels of magnitude were no doubt part of “a general cosmic conception involving universal relations in time and space and the provinces of divinity.”

Appendix VII

A Link Between Maya Era Day Passages and Period Endings

All era date passages on Classic Maya monuments are related in some way to Period Ending ceremonies, especially *k'atun* Period Endings. The passages are linked directly via a Distance Number or indirectly via two or more Distance Numbers and intervening dates. A good example of an indirect association is found with era day texts on the Temple of the Cross and the Temple of the Sun from Palenque (era day texts occur on the Temple of the Cross, Main Panel (D3-D8) and the Temple of the Sun, Main Panel (D16-E3). David Stuart (2006a:98) has clearly demonstrated that *Kan Balam II* constructed the entire Cross Group in anticipation of commemorating the 9.13.0.0.0 8 *Ajaw* 8 *Woh* Period Ending, and that the altar inhabiting the central plaza of the Cross Group is a “*k'atun* platform” that binds all three temples physically and temporally to the 13th *k'atun*. Specifically, Stuart states that the construction and dedication of the three temples on 9.12.19.14.12 5 *Eb* 5 *K'ayab* takes place in anticipation of the 9.13.0.0.0 *K'atun* ending that occurred a mere 68 days later (Stuart 2006a:98). Another monument that employs a similar strategy is Piedras Negras Altar 1. The monument contains an era day statement on Fragment B (blocks K1-P2). The latter part of the inscription carved on the Altar 1 supports, connects the era base date to a commemoration of the 9.13.0.0.0 8 *Ajaw* 8 *Woh* Period Ending and then casts forward to the future 10th *bak'tun* Period Ending on 10.0.0.0.0 7 *Ajaw* 18 *Sip* (a celebration that Piedras Negras would not historically commemorate due to the Classic Maya Collapse). So, it is apparent from these two examples that the mythic stories in each case were being evoked in celebration of the 13th *k'atun*.

The following is a short list of era day monuments containing direct and indirect associated Long Counts:

Direct

Quirigua Stela C	9.1.0.0.0	6 <i>Ajaw</i> 13 <i>Yaxk'in</i>
Coba Stela 1	9.12.0.0.0	10 <i>Ajaw</i> 8 <i>Yaxk'in</i>
Quirigua Altar P'	9.18.5.0.0	4 <i>Ajaw</i> 13 <i>Keh</i>
Tonina Mon. 34	9.18.5.0.0.0	4 <i>Ajaw</i> 13 <i>Keh</i>
“Tila” Stela A	10.0.0.0.0	7 <i>Ajaw</i> 8 <i>Sip</i>
Chichen, Caracol Panel 1	10.2.17.0.0	13 <i>Ajaw</i> 18 <i>Yaxk'in</i>

Indirect

Copan	9.11.0.0.0	12 <i>Ajaw</i> 8 <i>Keh</i>
Palenque T.C. & T.S.	9.13.0.0.0	8 <i>Ajaw</i> 8 <i>Woh</i>
Piedras Negras Alt. 1	9.13.0.0.0	8 <i>Ajaw</i> 8 <i>Woh</i>
Dos Pilas Panel 18	9.13.5.0.0	1 <i>Ajaw</i> 3 <i>Pohp</i>
Quirigua. Zoo. G	9.17.15.0.0	5 <i>Ajaw</i> 3 <i>Muan</i>
La Corona Altar 4	10.0.0.0.0	7 <i>Ajaw</i> 18 <i>Sip</i>

Nearly all era day statements are linked by scribes to a *k'atun* and sometimes *jo'tun* celebrations (with the exception that Chichen, Caracol Panel 1 is connected to the 17th *tun* Period Ending on 10.2.17.0.0 13 *Ajaw* 18 *Yaxk'in*). This correspondence leads to the possibility that monuments with era day references that contain no link to a Long Count may also be tied to similar Period Endings. For Instance, if it is known what Classic ruler commissioned a monument with era day inscriptions (that has no historical date for a reference), then a *k'atun* that a ruler celebrated as king may be linked to the era passage. For instance, take Panel 18 of Dos Pilas. If the panel was commissioned by *Balah Chan K'awiil*, it could have been carved in connection to the 9.13.5.0.0 *jo'tun* Period Ending celebration cycle which falls near the death date of the king (Freidel and Guenter 2006). It is known from Stela 5 (F2) at Aguateca that the king did in fact celebrate the 13th *k'atun* (Houston and Mathews 1985), so the link of Panel 18 near to the 13th *k'atun* is a real possibility.

A similar logic can be made when connecting a Period Ending with the Vase of the 11 Gods (K7750) and its owner *K'ak' Ukalaw Chan Chaak*. If the owner of the cup participated in a ritual reenactment of the era day myth (with the king taking on the role of the Sun God as the *Wuk Chapaht Tz'ikin K'inich Ajaw*), then the scene could very well depict a historical reenactment of the era day founding event. The era day reenactment would have been most likely tied to the 9.17.0.0.0 Period Ending celebration since *K'ak' Ukalaw Chan Chaak* short reign overlapped only a single *k'atun* Period Ending, that of the 17th *k'atun*.

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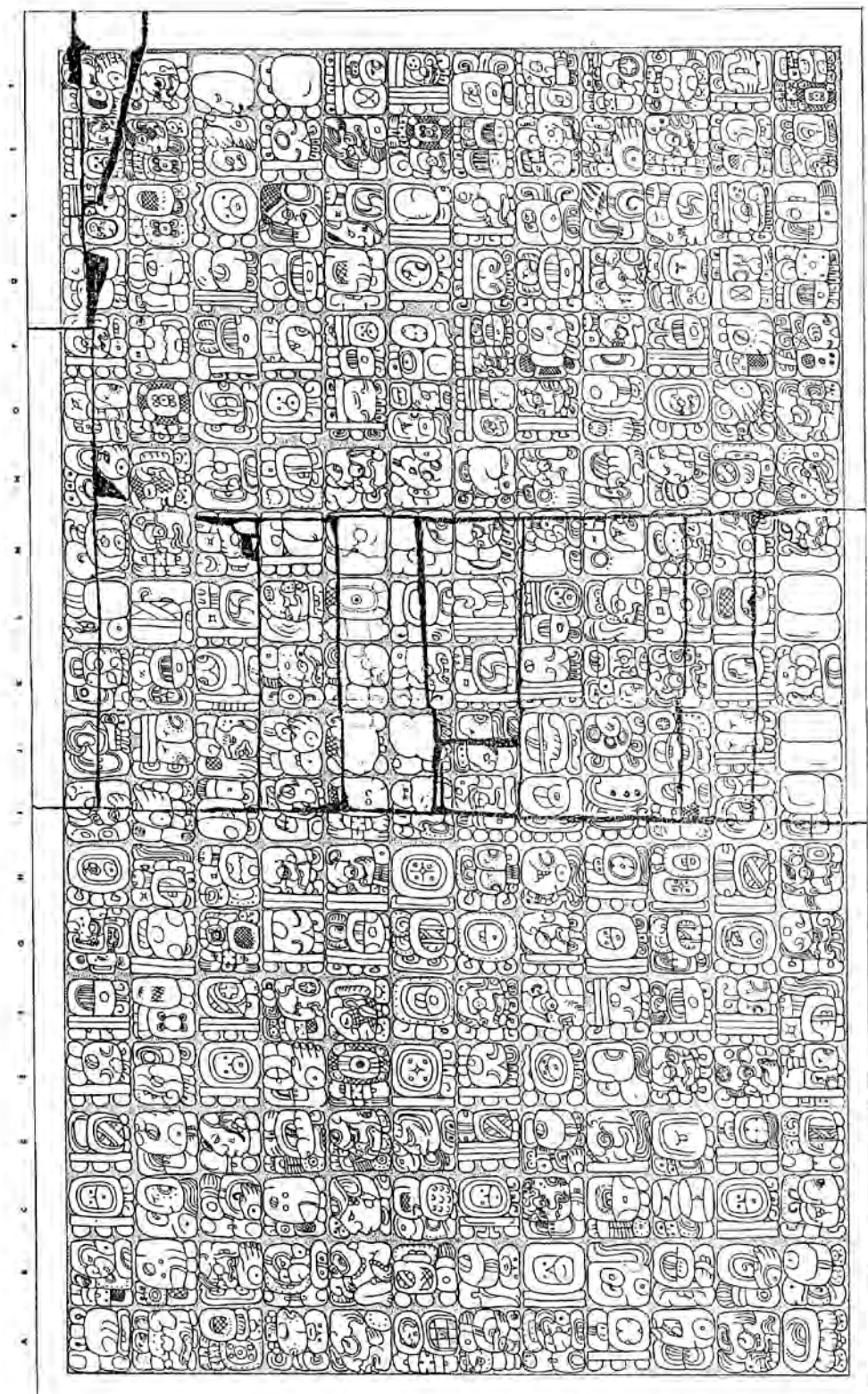


Fig. II.1: Palenque, Temple of the Inscriptions, West Tablet (drawing by Linda Schele courtesy of David Schele and FAMSI).

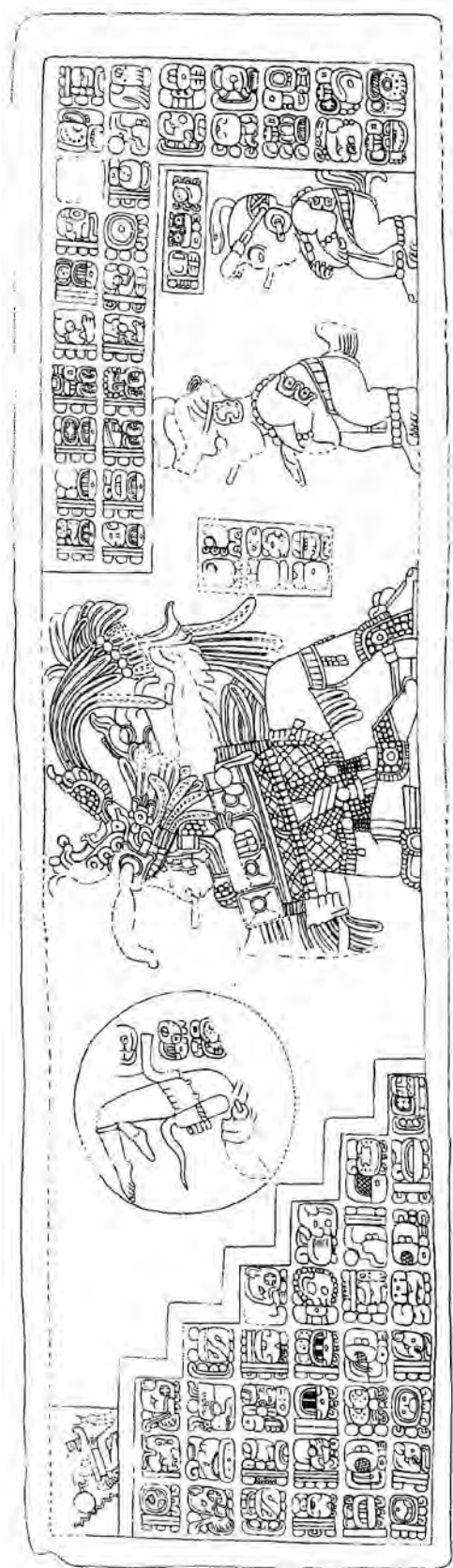


Fig. II.2: Yaxchilan, Temple 33, Stairway II, Step VII (drawing by John Montgomery).



Fig. II.3: Palenque South Side Temple XIX Platform (composite photo by Jorge Perez de Lara).

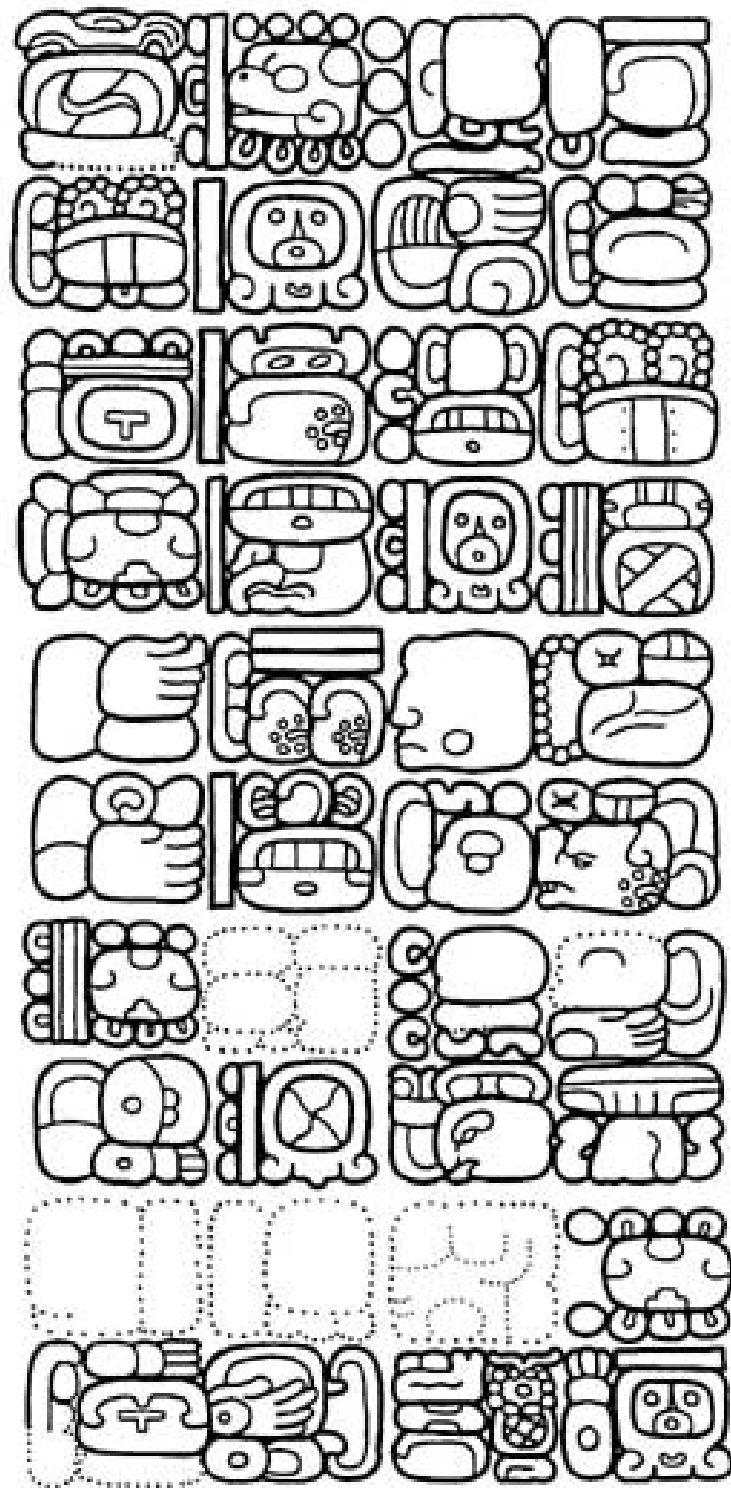


Fig. II.4: Quirigua, Zoomorph G, West Side, Col. M' - N' (drawing by Matthew Looper).



Fig. II.5: Copan, Stela D (drawing by Linda Schele courtesy of David Schele and FAMSI).



Fig. II.6: Ruler Portrait as the 9 *Ajaw* Day Sign Cartouche, “Puerto Barrios” Altar (photo by Carl Callaway 2010).



a



b

Figure II.7a: Kaminaljuyu, Stela 10 (inverted rubbing of a reconstructed composite cast by Joan W. Patten); Figure II.7b: Kaminaljuyu, Stela10, day sign cartouche with blood tassels (photo by Carl Callaway, digitally enhanced by Paul Johnson).



Fig. II.8: A portion of Chocoma, Monument I showing a disembodied head and blood scroll (photo by Carl Callaway)



Figure III.1: Chichen Itza, Caracol Panel 1, right lateral face (after Ruppert 1935:137, fig. 167).



Figure III.2: Chichen Itza, Caracol Panel 1, blocks Q8-R10 (photo by Carl Callaway).

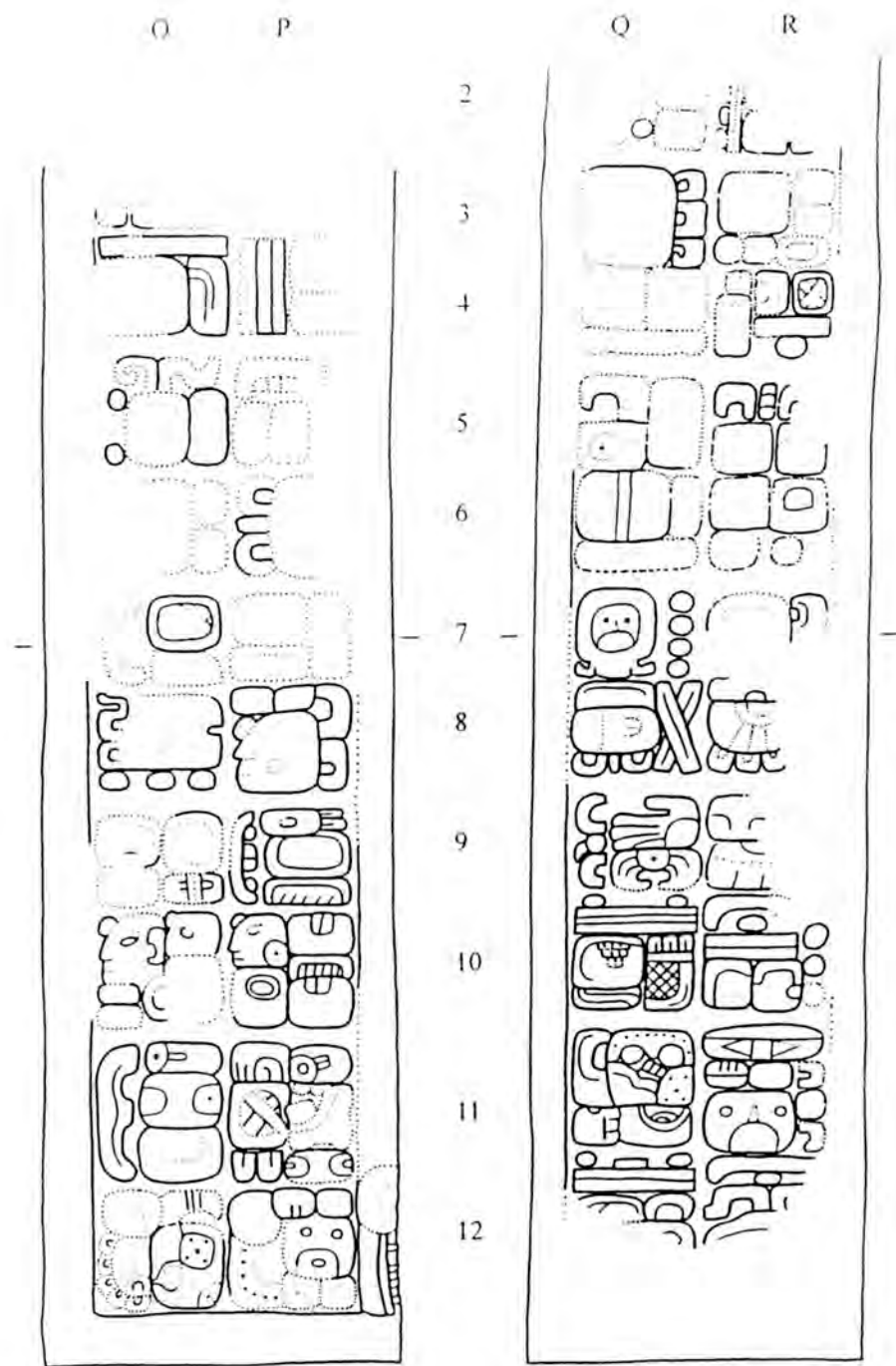


Figure III.3: Chichen Itza, Caracol, Panel 1, lateral sides (drawings by Alexander Voß).

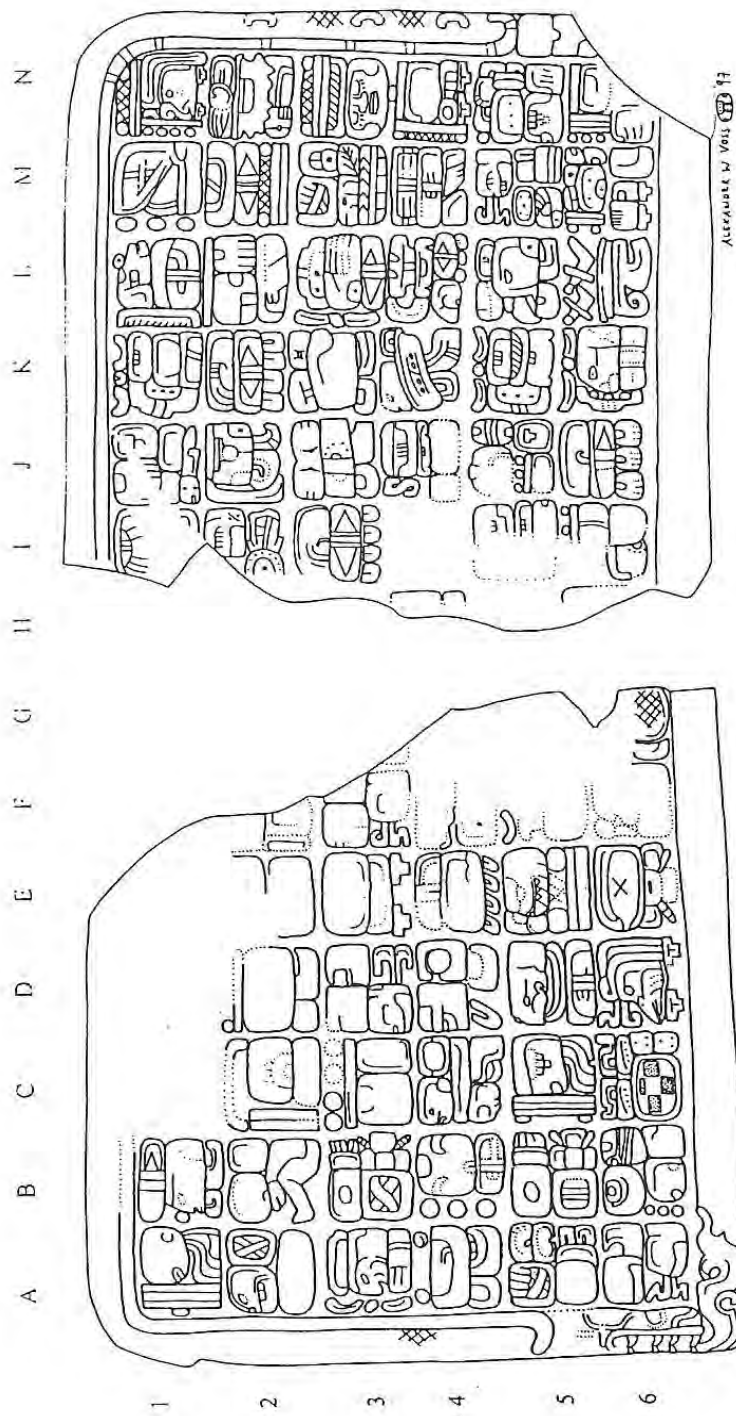
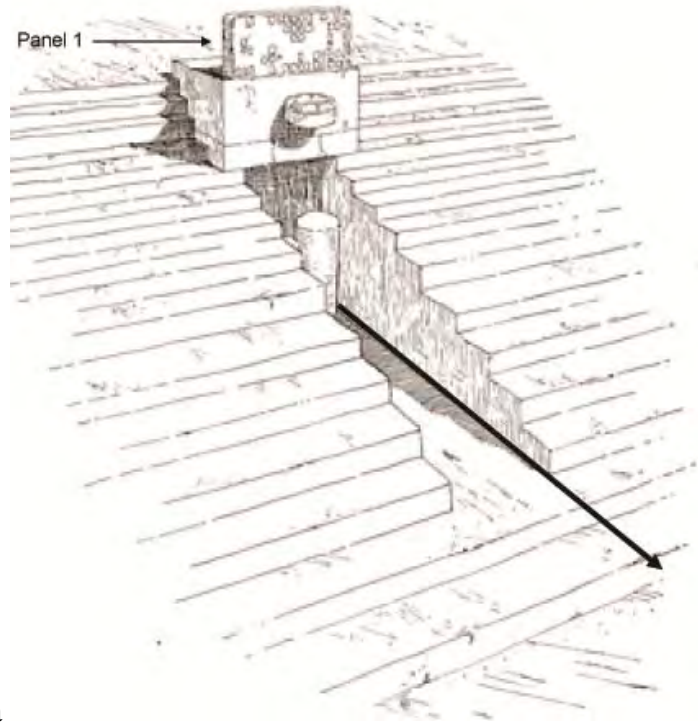
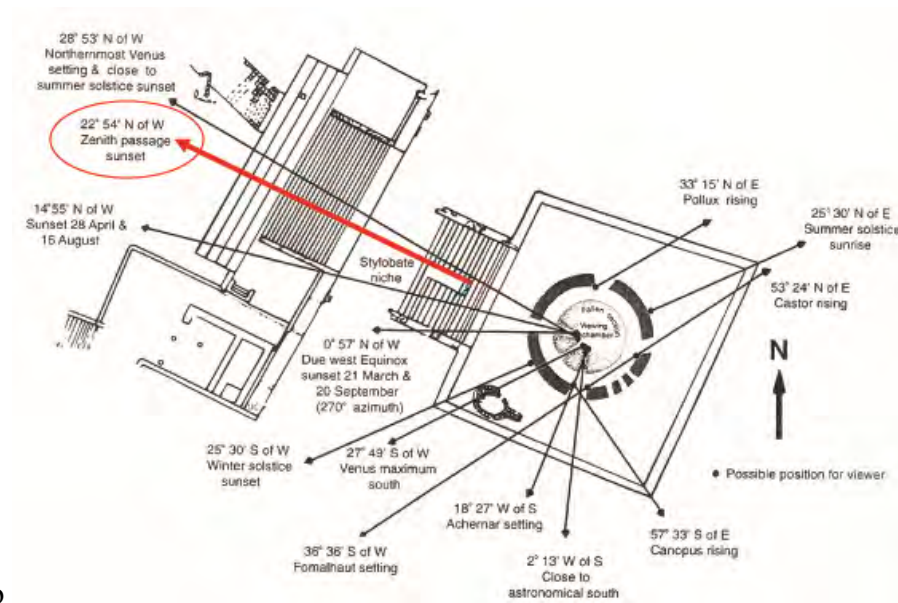


Figure III.4: Chichen Itza, Caracol Panel 1, front side (drawing by Alexander Voß).



a

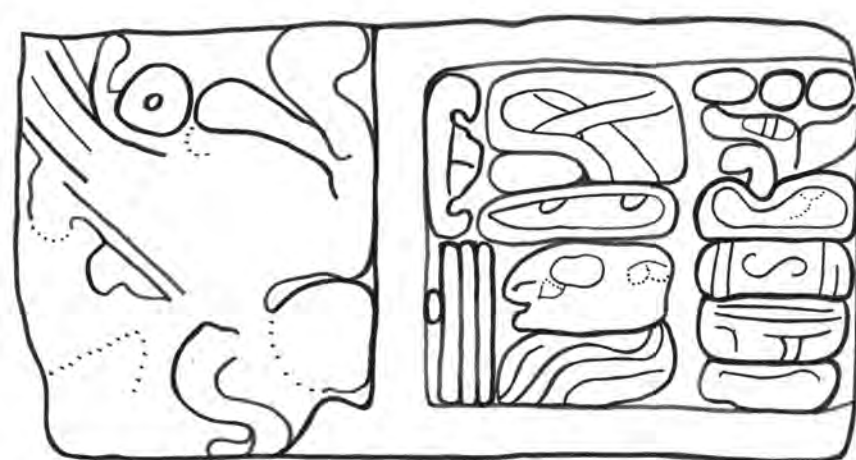


b

Figure III.5a: The Caracol Panel 1 sitting above a stylobate niche of upper stairway (drawing after Ruppert 1936: fig. 171, modified by Carl Callaway); Figure III.5b: Caracol Map (after Aveni, 1980, figs 90-91, modified by Carl Callaway).



a



b

Figure III.6a: Caracol, Hieroglyphic Band, Fragment 5 (photo after Ruppert 1935: fig 337, number 5); Figure III.6b: Caracol, Hieroglyphic Band, Fragment 5 (drawing by Carl Callaway).



Figure III.7: Coba Stela 1, west side, atop Platform IX shrine with Altar 8 in foreground (photo by Carl Callaway 2010).

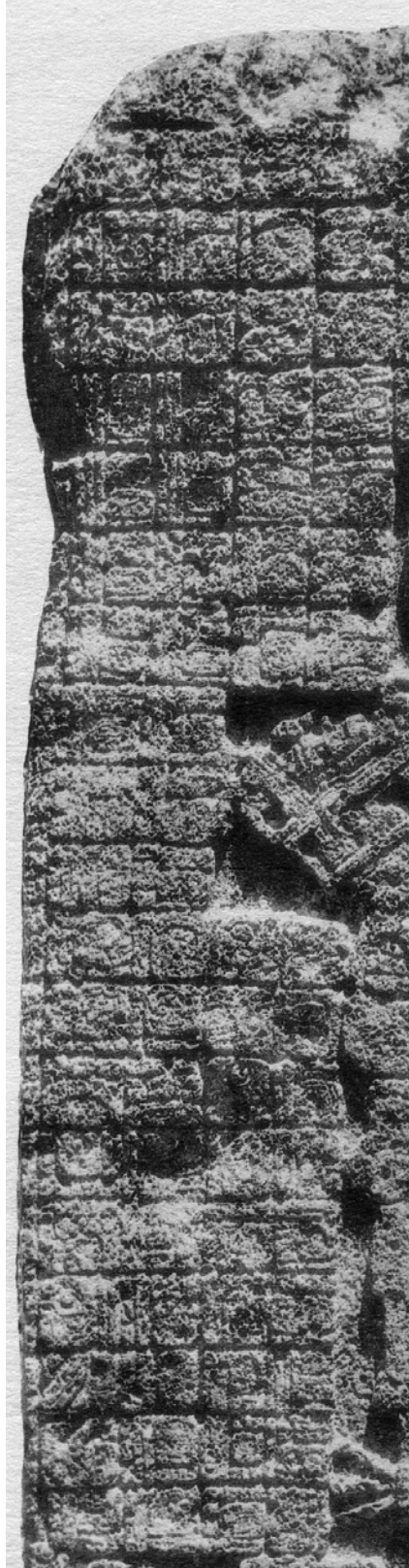


Figure III.8: Coba, Stela 1, back (photo after Thompson et al. 1932:plate 2).



Figure III.9: Coba, Stela 1, blocks M18-N21 (after Thompson et al. 1932:plate 2).

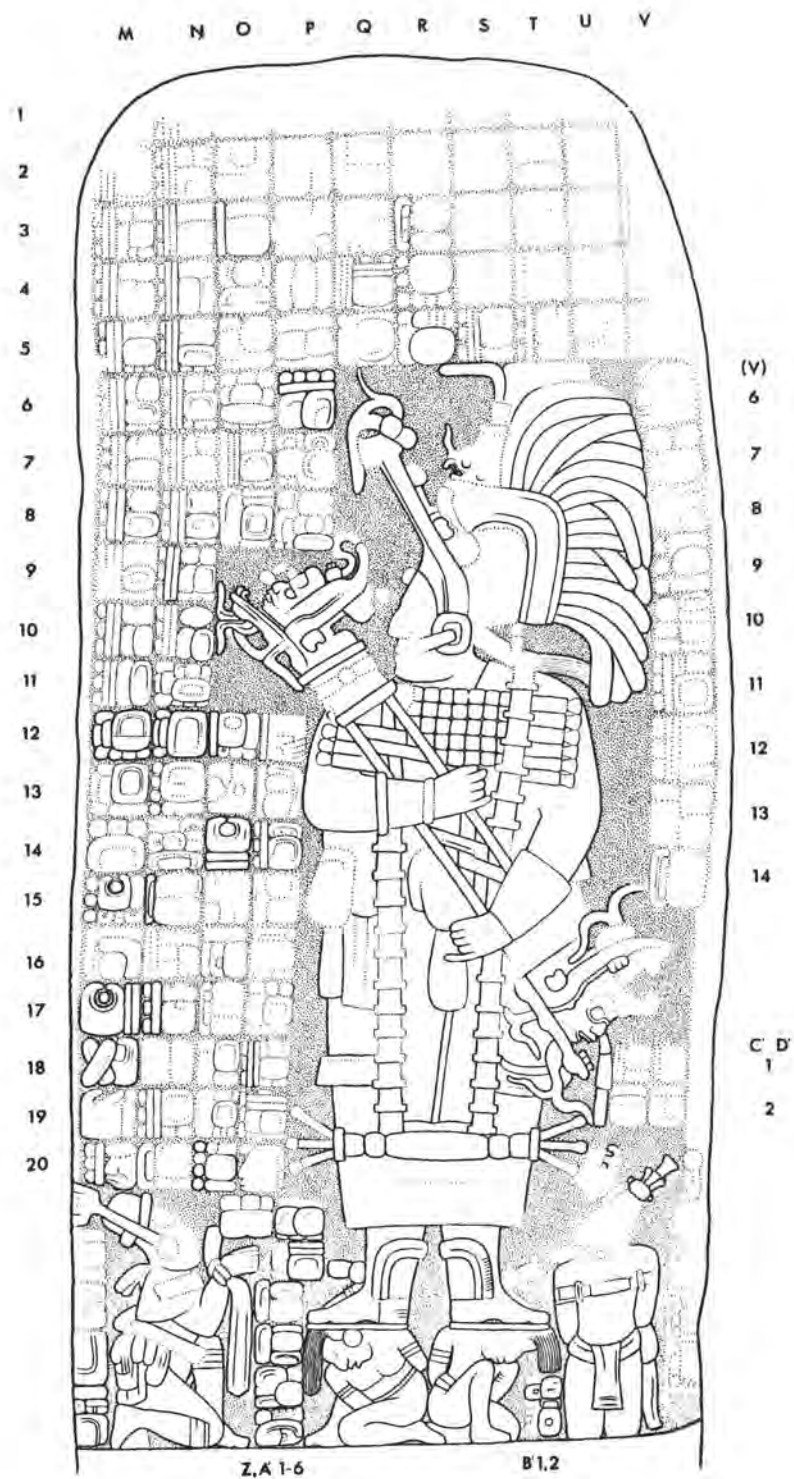


Figure III.10: Coba, Stela 1 (drawing by Ian Graham).

a



b



Figure III.11a: Coba, Stela 1, block M20 (photo by Carl Callaway 2010); Figure III.11b: Coba, Stela 1, block N20 (after Thompson et al. 1932:plate 2).

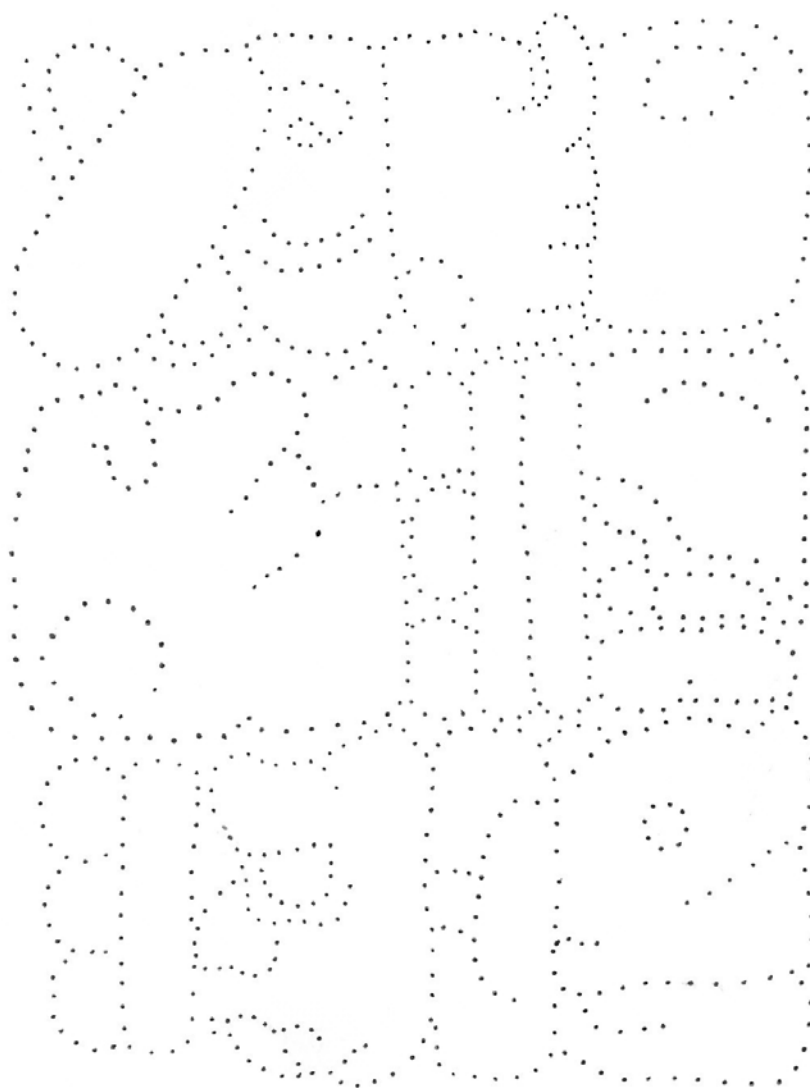


Figure III.12: Coba, Stela 1, blocks M18-N21 (after Thompson et al. 1932:Plate 2; drawing by Carl Callaway).

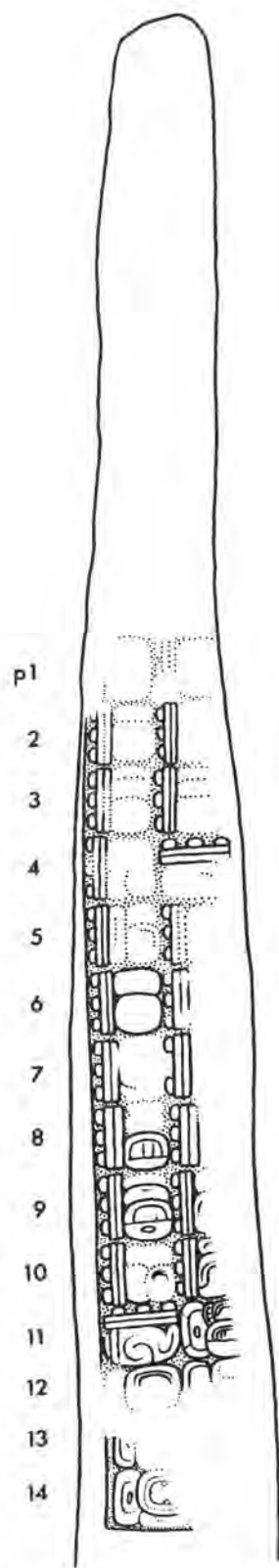


Figure III.13: Coba, Stela 5, right side (drawing by Ian Graham).



Figure III.14: Coba, Stela 28 photo mosaic (photos by Hutch Kinsmin with photo composite by Paul Johnson).



Figure III.15: Coba Stela 28, blocks A10-B11 (photo by Carl Callaway 2010).

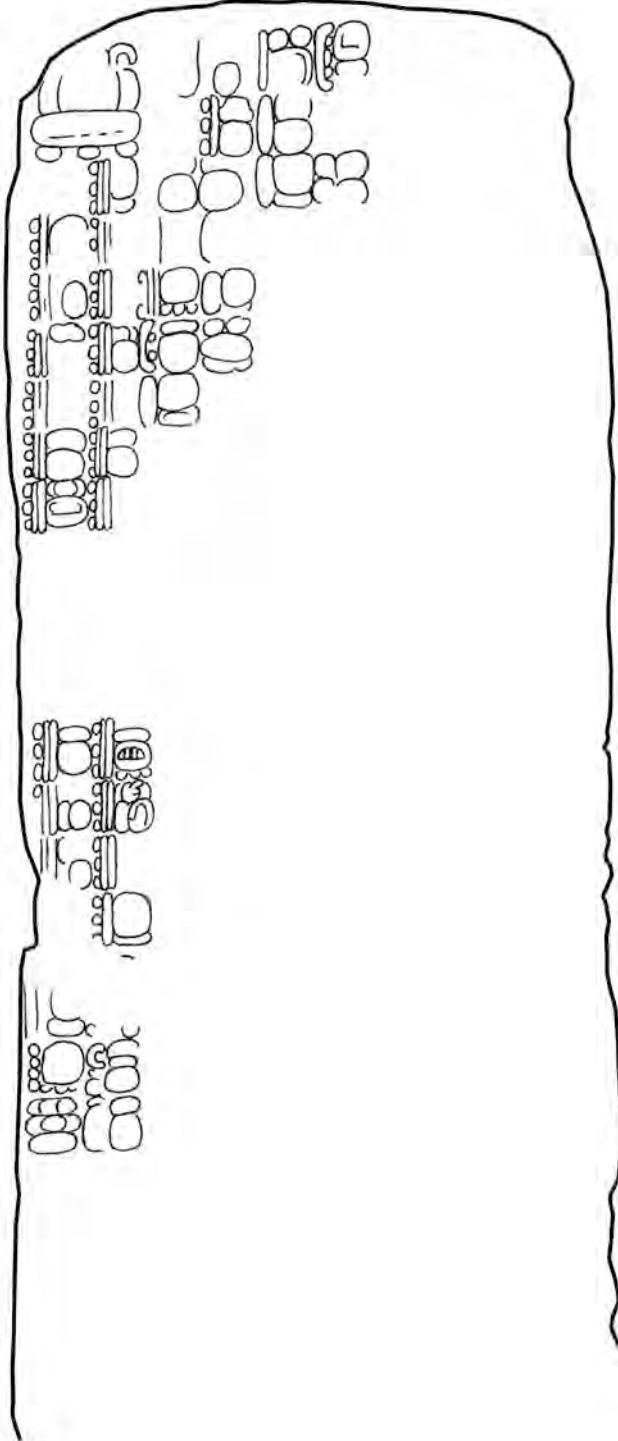


Figure III.16: Coba, Stela 28 (sketch by Carl Callaway after a field drawing by Erik Von Euw).

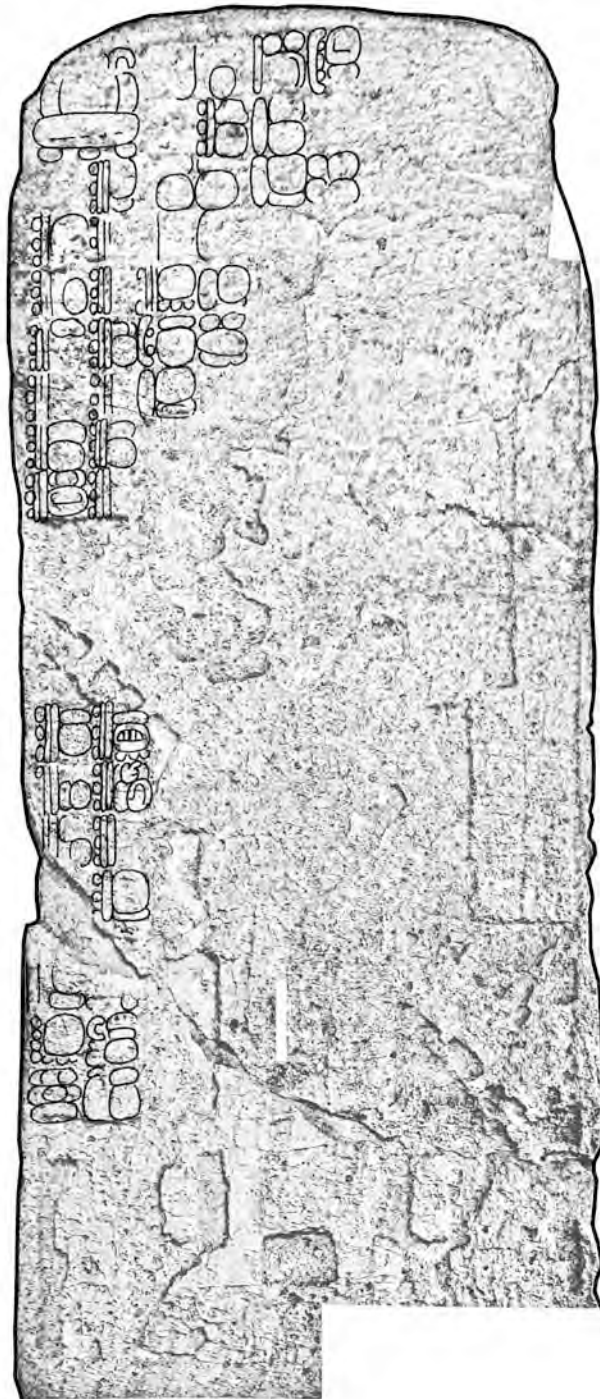


Figure III.17: Coba, Stela 28 (overlay of Carl Callaway's drawing onto a Stela 28 photo mosaic by Paul Johnson with photos provided by Hutch Kinsmin).

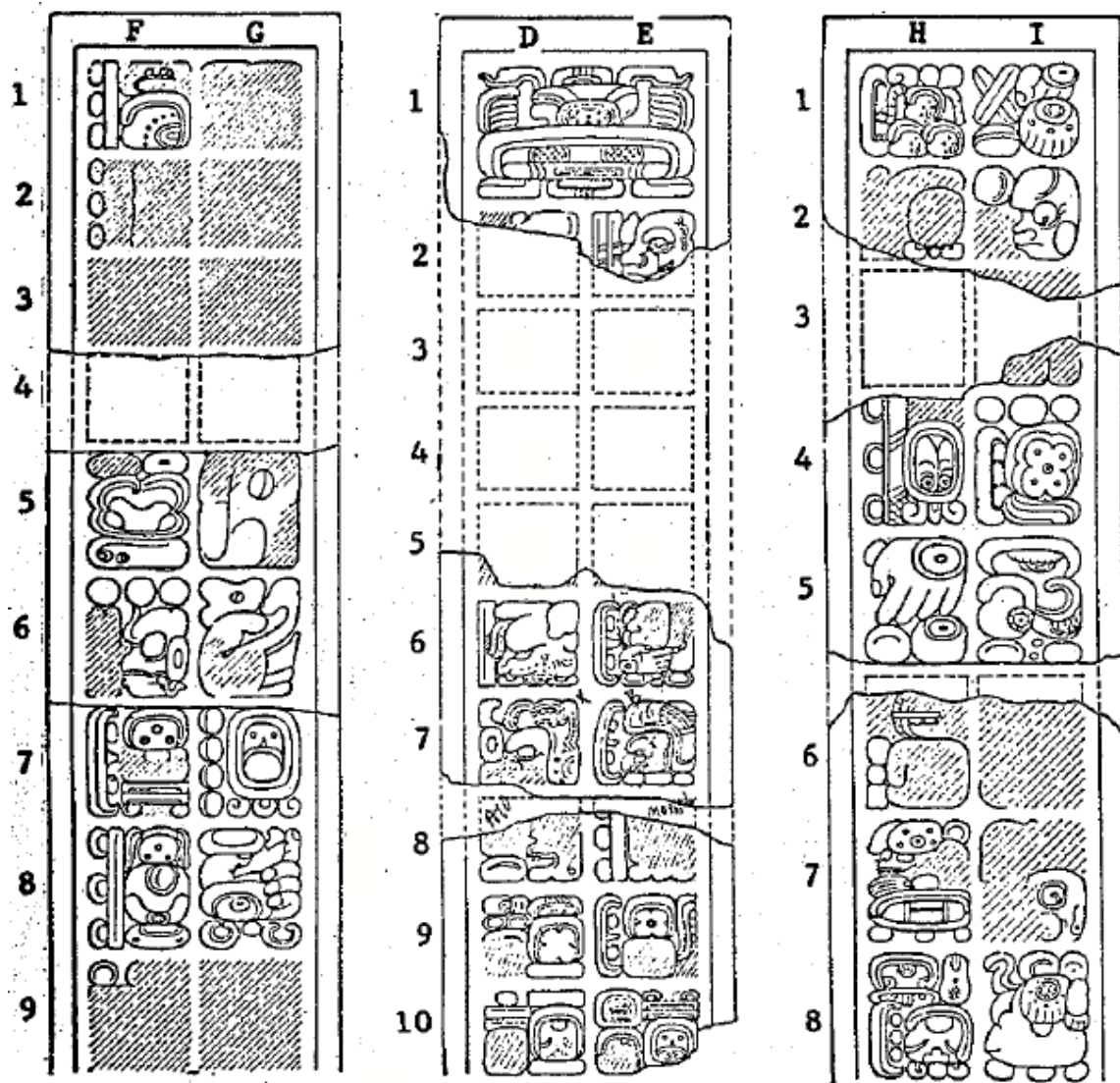


Figure III.18: Copan, Stela 23 (drawings by Sylvanus Morley).



Figure III.19: Copan, Stela J, west side (photo by Paul Johnson).

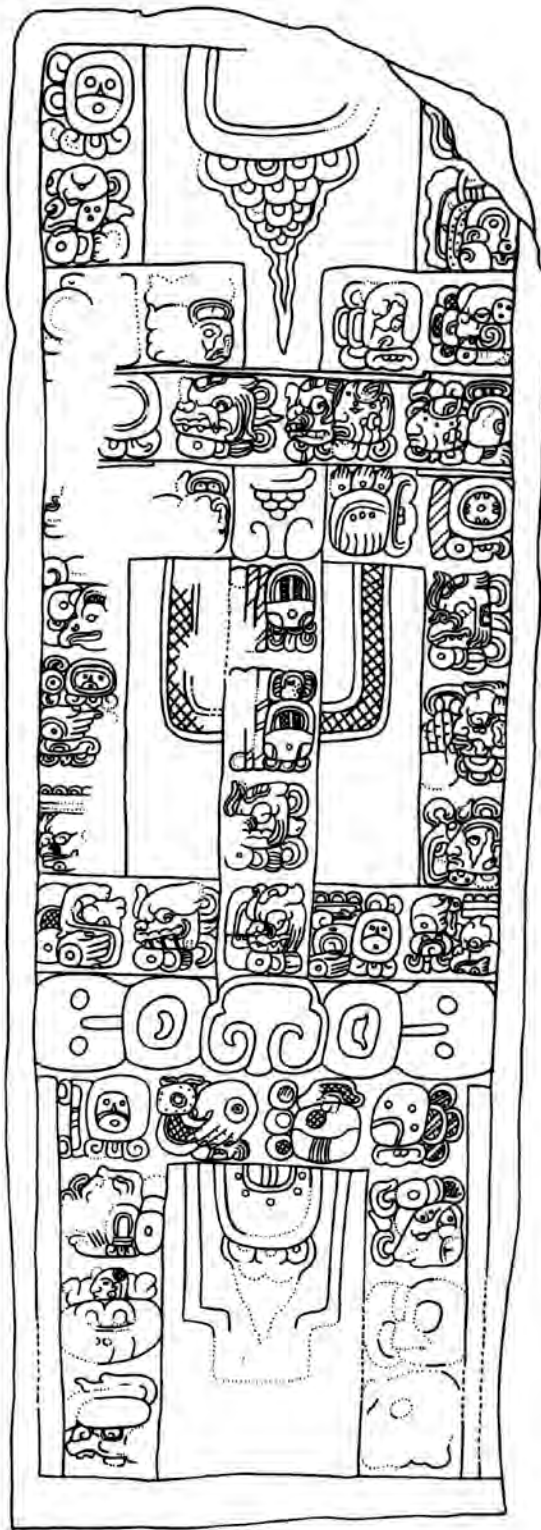


Figure III.20: Copan, Stela J, west side (drawing by Linda Schele courtesy of David Schele and FAMSI).



Figure III.21: Copan, Stela J, west side with numbered blocks (drawing by Linda Schele, courtesy of David Schele and FAMSI, with numbered blocks and alterations by Carl Callaway).



Figure III.22: Copan, Stela J, east side (drawing by Linda Schele courtesy of David Schele and FAMSI).

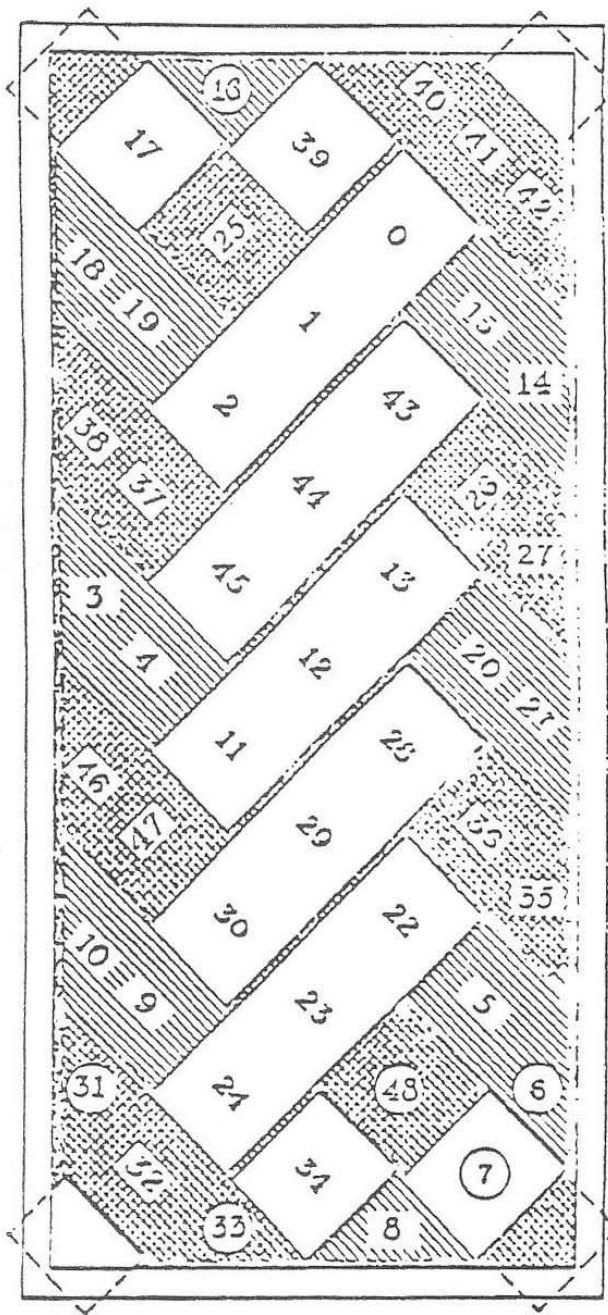


Figure III.23: Copan, Stela J, east side reading order (after Thompson 1944).

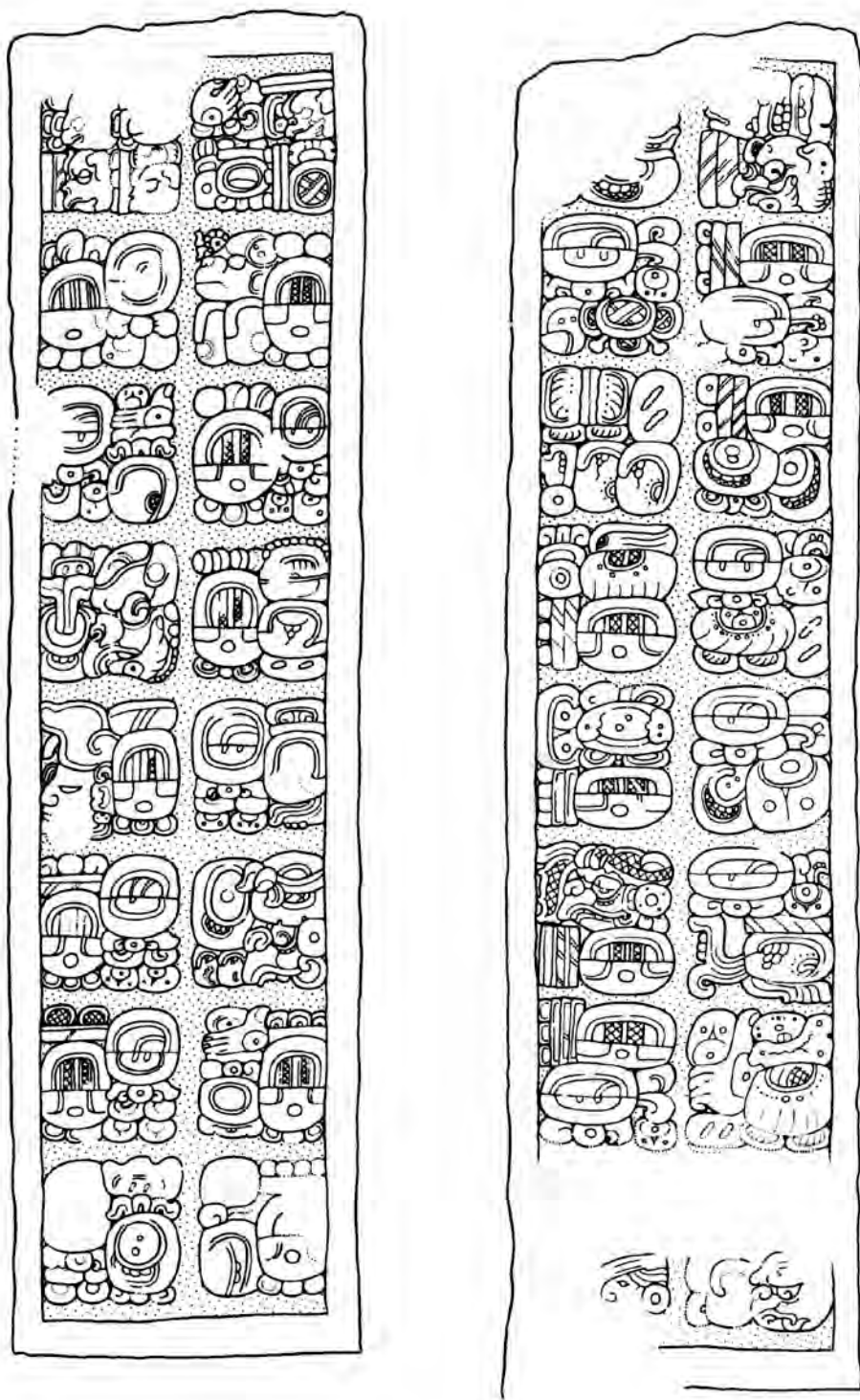


Figure III.24: Copan, Stela J, north and south sides (drawings by Linda Schele, courtesy of David Schele and FAMSI, inked by Mark Van Stone).

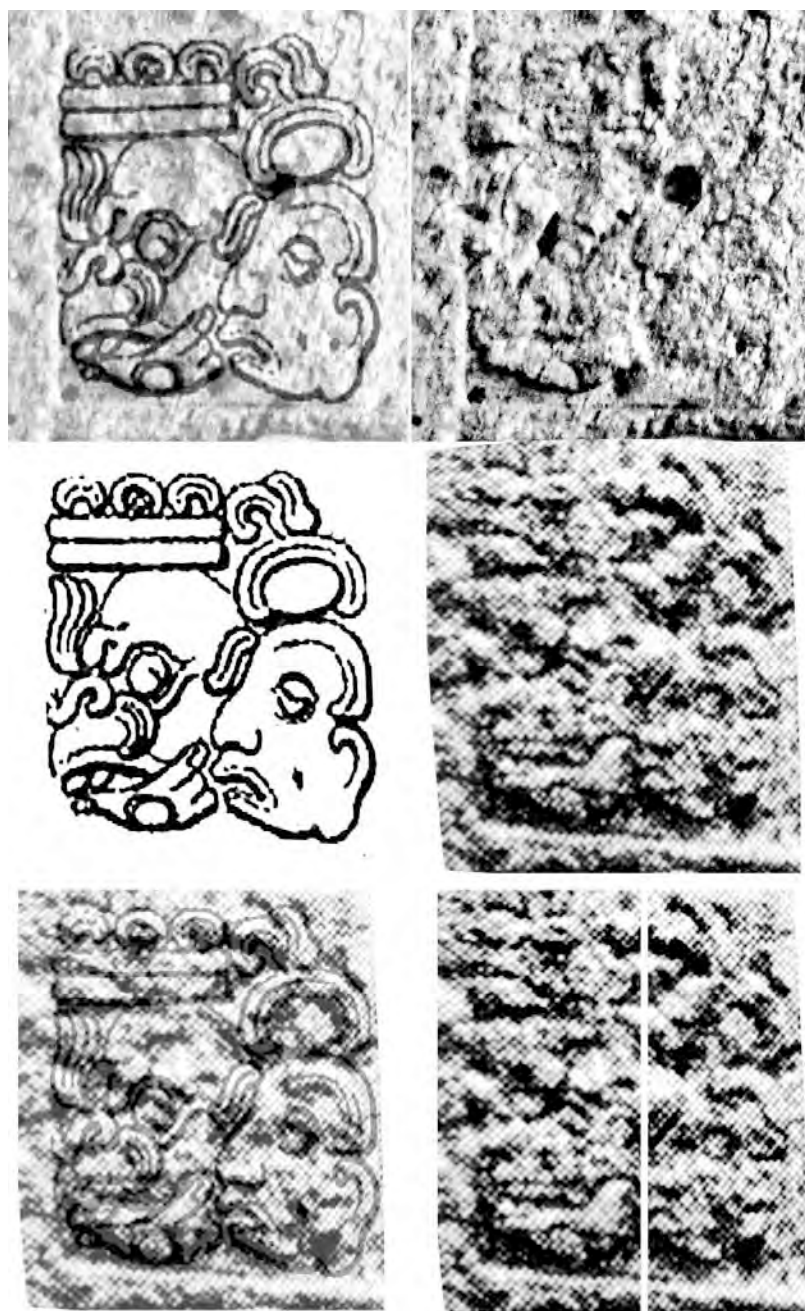


Figure III.25: Copan, Stela J, west, block p18 with a comparison of Maudslay's drawing by Annie Hunter with photos by Maudslay (1889-1902) and Carl Callaway (2010) (drawing overlays by Paul Johnson).

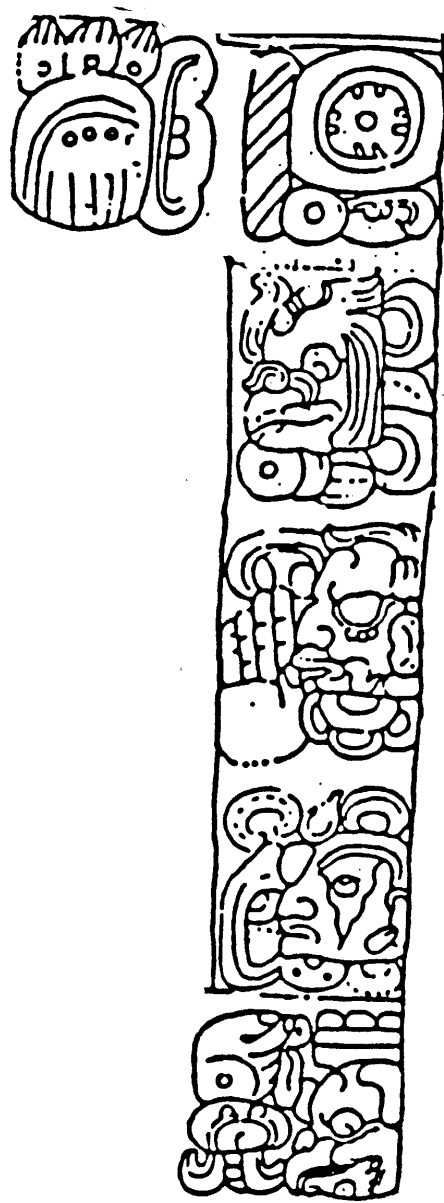


Figure III.26: Copan, Stela J west, blocks p23-p29 (drawing by Linda Schele courtesy of David Schele and FAMSI).



a



b

Figure III.27a: Copan, Stela J, west, block p18 (photo by Carl Callaway); Figure III.27b: Copan, Stela J, west, block p18 (drawing by Annie Hunter in Maudslay 1889-1902).

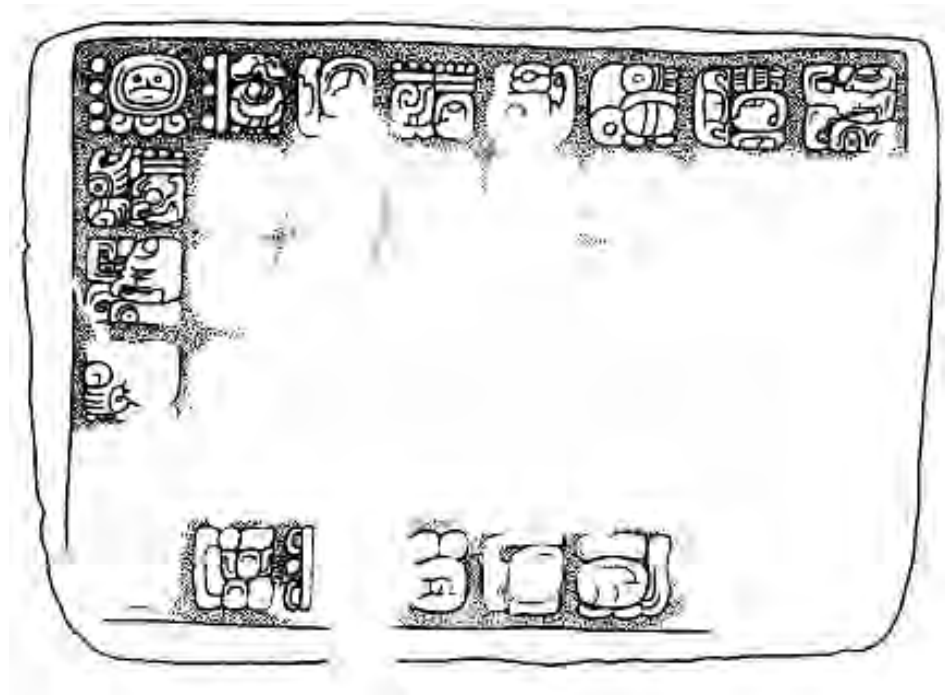


Figure III.28: Dos Pilas Panel 18, Structure L5-49 (drawing by David Stuart).

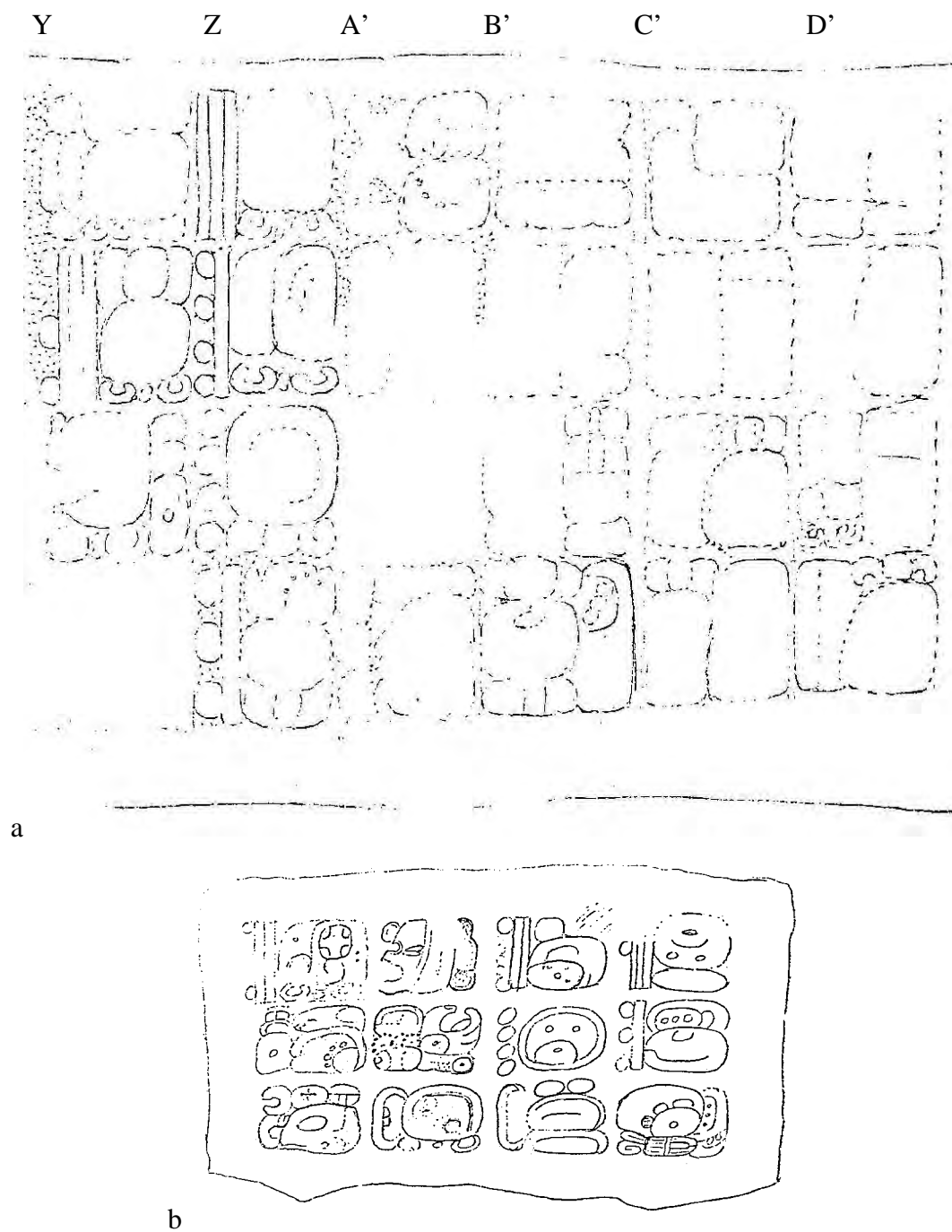


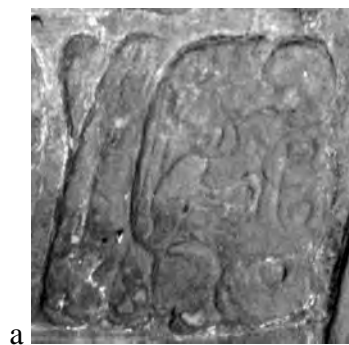
Figure III.29a: La Corona Altar 4, blocks Y1-D'4 (drawing by David Stuart after Canuto et al. 2009:fig. 2.15); Figure III.29b: La Corona Block I/A (drawing by Ian Graham).



Figure III.30: Palenque, Tablet of the Cross, blocks D3-D8 (drawing by Linda Schele courtesy of David Schele and FAMSI).



Figure III.31: Palenque, Tablet of the Cross, blocks C3-D8 (photo by Paul Johnson).



a

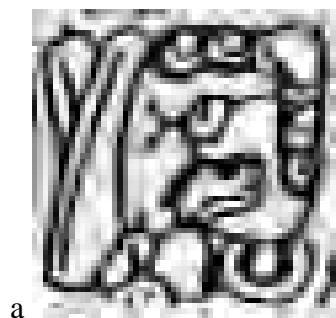


b

Figure III.32a: Palenque, Tablet of the Sun, block D16 (photo by Carl Callaway 2010);
Figure III.32b: Palenque, Tablet of the Sun, blocks E1-E3 (photograph by Carl Callaway 2010).



Figure III.33a: Palenque, Tablet of the Sun, main panel, blocks C16-D16 from monument cast, Museum of Man, San Diego (photo by Carl Callaway 2010); Figure III.33b: Palenque, Tablet of the Sun, blocks E1-E3 from monument cast, Museum of Man, San Diego (photo by Carl Callaway 2010).



a



b

Figure III.34a: Palenque, Tablet of the Sun, main panel, block D16 (photo by Linda Schele courtesy of David Schele and FAMSI); Figure III.34b: Palenque, Tablet of the Sun, blocks E1-E3 (photo by Linda Schele courtesy of David Schele and FAMSI).



Figure III.35: Piedras Negras Altar 1, *in situ* with rim text showing the era date (photo by Linton Satterthwaite, circa 1931 [image from Satterthwaite photo album “Piedras Negras 1931”] courtesy of University of Pennsylvania Museum of Archaeology and Anthropology).



Figure III.36: The moving of Piedras Negras Altar 1 (photo by Linton Satterthwaite, circa 1931; [image #15658] courtesy of the University of Pennsylvania Museum Archaeology and Anthropology).



a



b



c



d



e

Figure III.37a: Piedras Negras Altar 1, Fragment D; Figure III.37b: Fragment A; Figure III.37c: Fragment B, left half; Figure III.37d: Fragment B, right half; Figure III.37e: Fragment C (photos after Morley 1937-1938; plate 138f, plate 143a-d, 144a-d courtesy of Mesoweb).

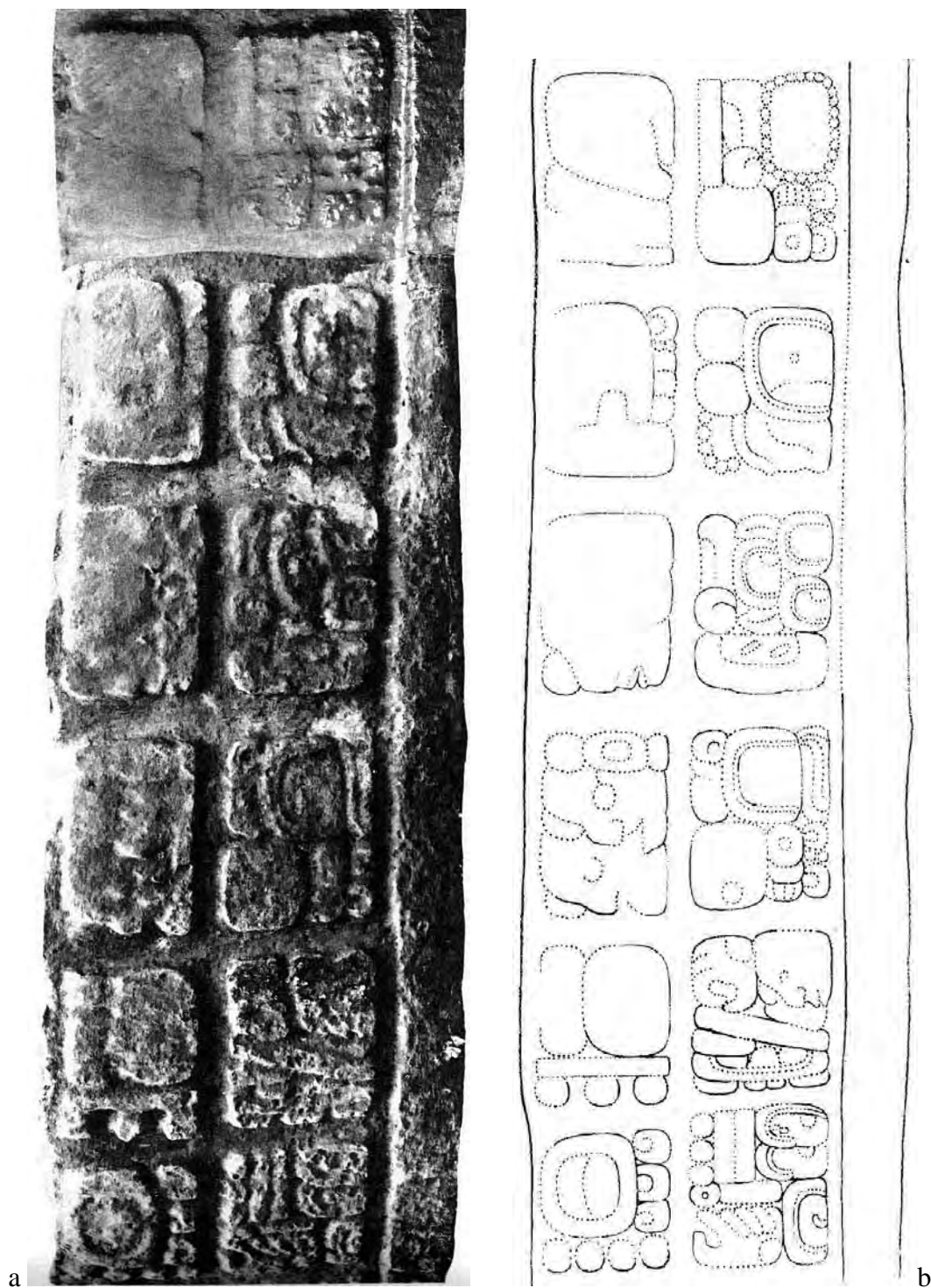
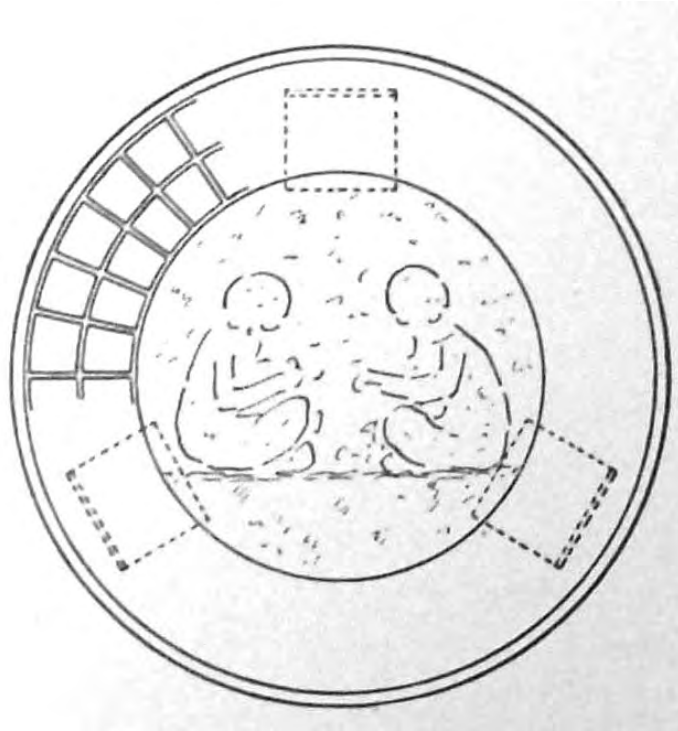


Figure III.38a: Piedras Negras Altar 1, Fragment B, right half, blocks K1-S2 (photo after Morley 1937-1938; plate 144c courtesy of Mesoweb); Figure III.38b: Piedras Negras Altar 1, Fragment B, right half, blocks K1-S2 (drawing by John Montgomery courtesy of FAMSI).



a

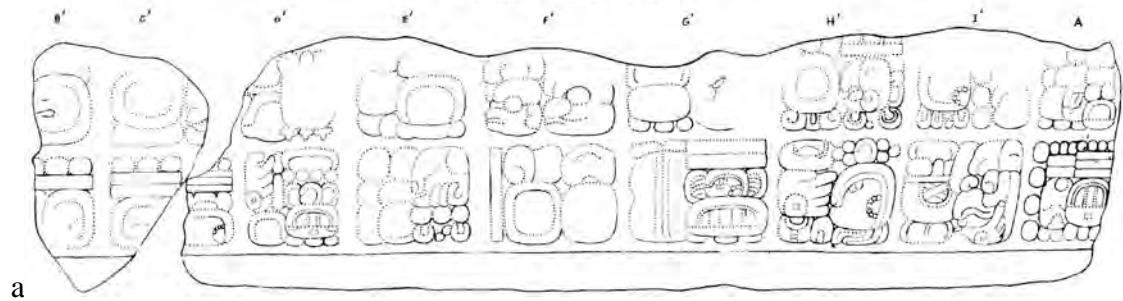


b

Figure III.39a: Piedras Negras Altar 1, top view (drawing after Maler 1901:45, fig19); Figure III.39b: Piedras Negras Altar 1, top view (photo after Morley 1937-38: plate 138f, courtesy of Mesoweb).

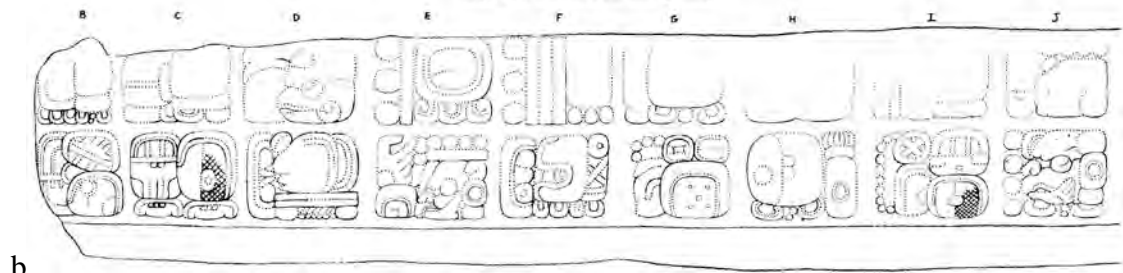
Piedras Negras, Altar 1, Fragment D (Left) and Fragment A (Right)

Copyright © 2000 John Montgomery



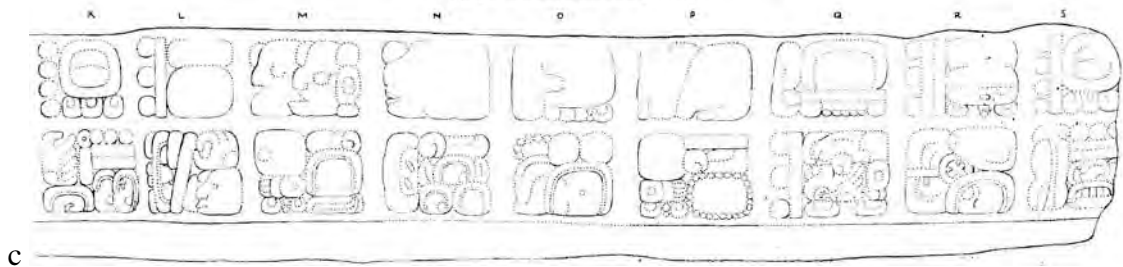
Piedras Negras, Altar 1, Fragment B (Left Half)

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Piedras Negras, Altar 1, Fragment B, Right Half

Copyright © 2000 John Montgomery



Piedras Negras, Altar 1, Fragment C

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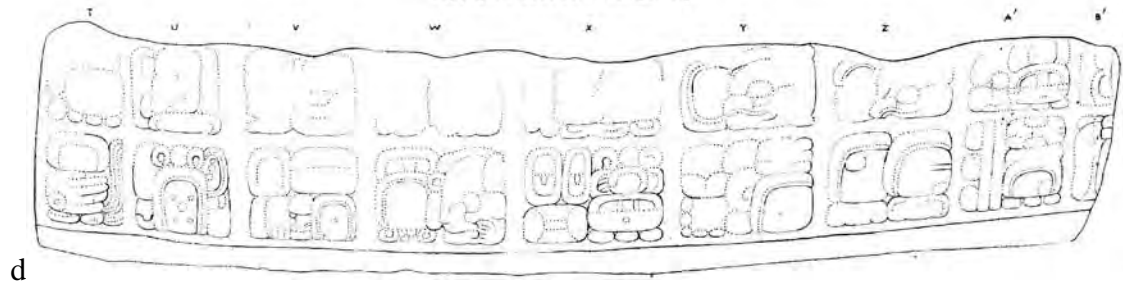
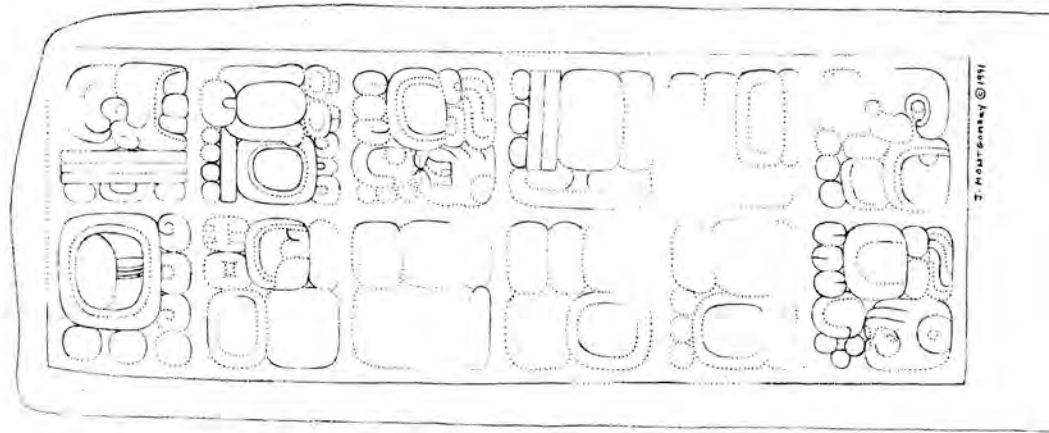
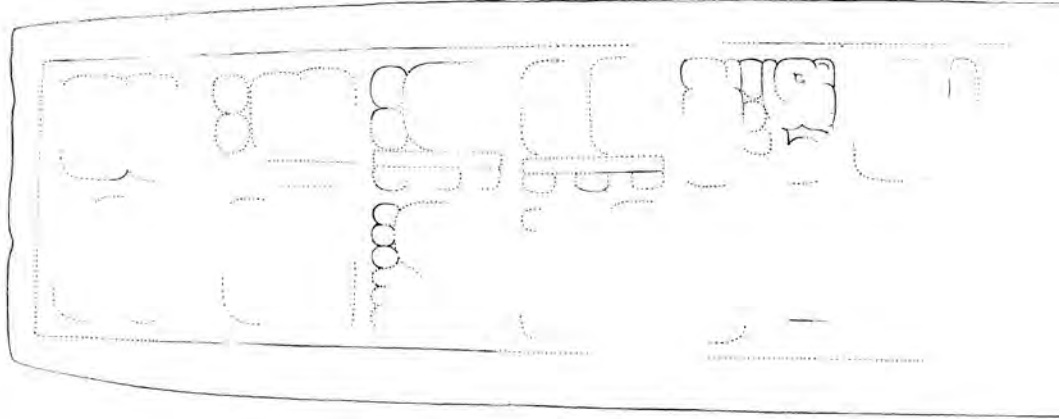


Figure III.40a-d: Piedras Negras Altar 1, Fragments A through D (drawings by John Montgomery courtesy of FAMSI).

**Piedras Negras, Altar 1,
Support 1**
Copyright © 2000 John Montgomery



**Piedras Negras, Altar 1,
Support 2**
Copyright © 2000 John Montgomery



Piedras Negras, Altar 1, Support 3
Copyright © 2000 John Montgomery

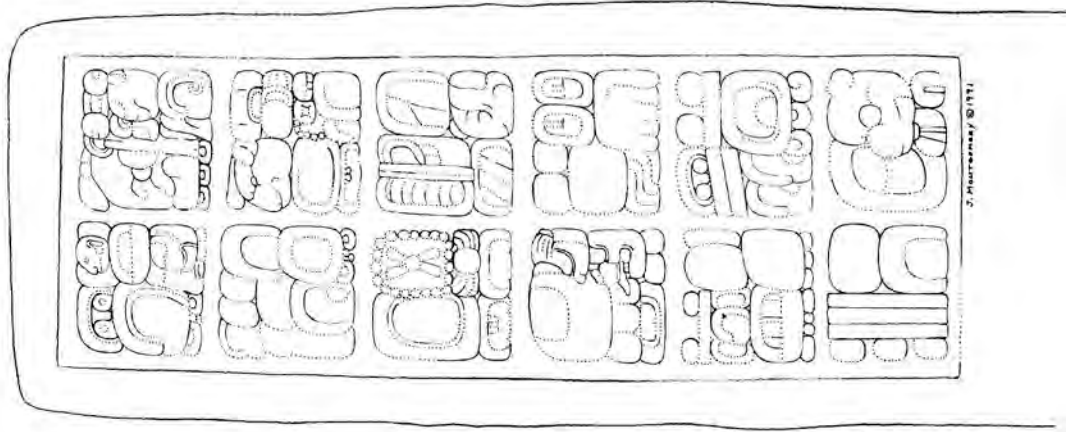


Figure III.41a-c: Piedras Negras Altar 1, Supports 1-3 (drawings by John Montgomery courtesy of FAMSI).



Figure III.42: Quirigua Stela C, east text (A1-B6) *in situ* (photos by Carl Callaway 2010).



Figure III.43: Quirigua Stela C, east text (A7-B15) *in situ* (photos by Carl Callaway 2010).



Figure III.44a: Quirigua, Stela C, east side (A1-B5) (photo of cast from San Diego Museum of Man by Paul Johnson). Figure III.44b: Drawing of Quirigua, Stela C, east side (A1-B5) (drawing by Annie Hunter).

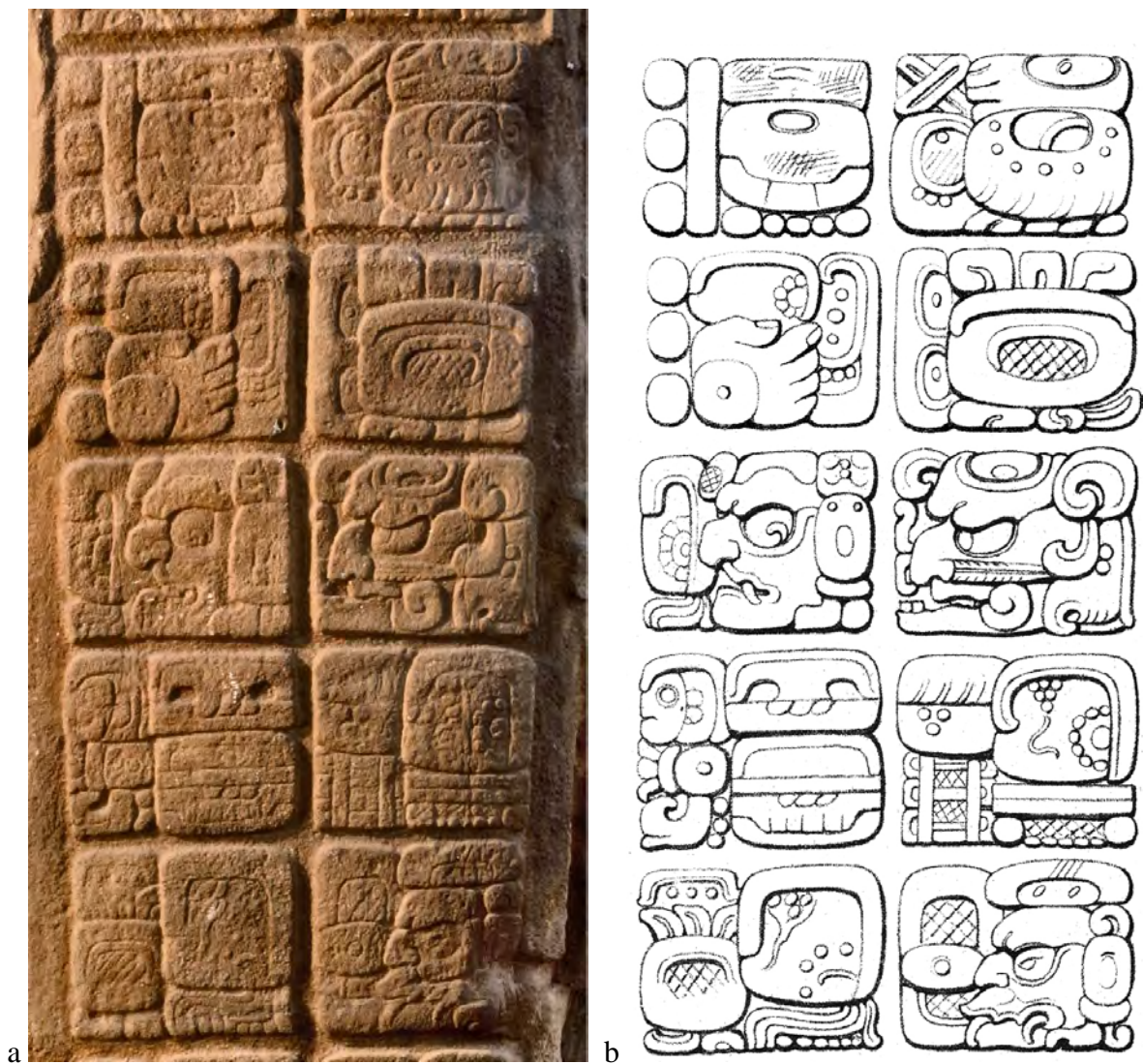


Figure III.45a: Quirigua, Stela C, east side (A6-B10) (photo of cast from San Diego Museum of Man by Paul Johnson). Figure III.45b: Drawing of Quirigua, Stela C, east side (A6-B10) (drawing by Annie Hunter).



Figure III.46a: Quirigua, Stela C, east side (A11-B15) (photo of cast from San Diego Museum of Man by Paul Johnson). Figure III.46b: Drawing of Quirigua, Stela C, east side (A11-B15) (drawing by Annie Hunter).

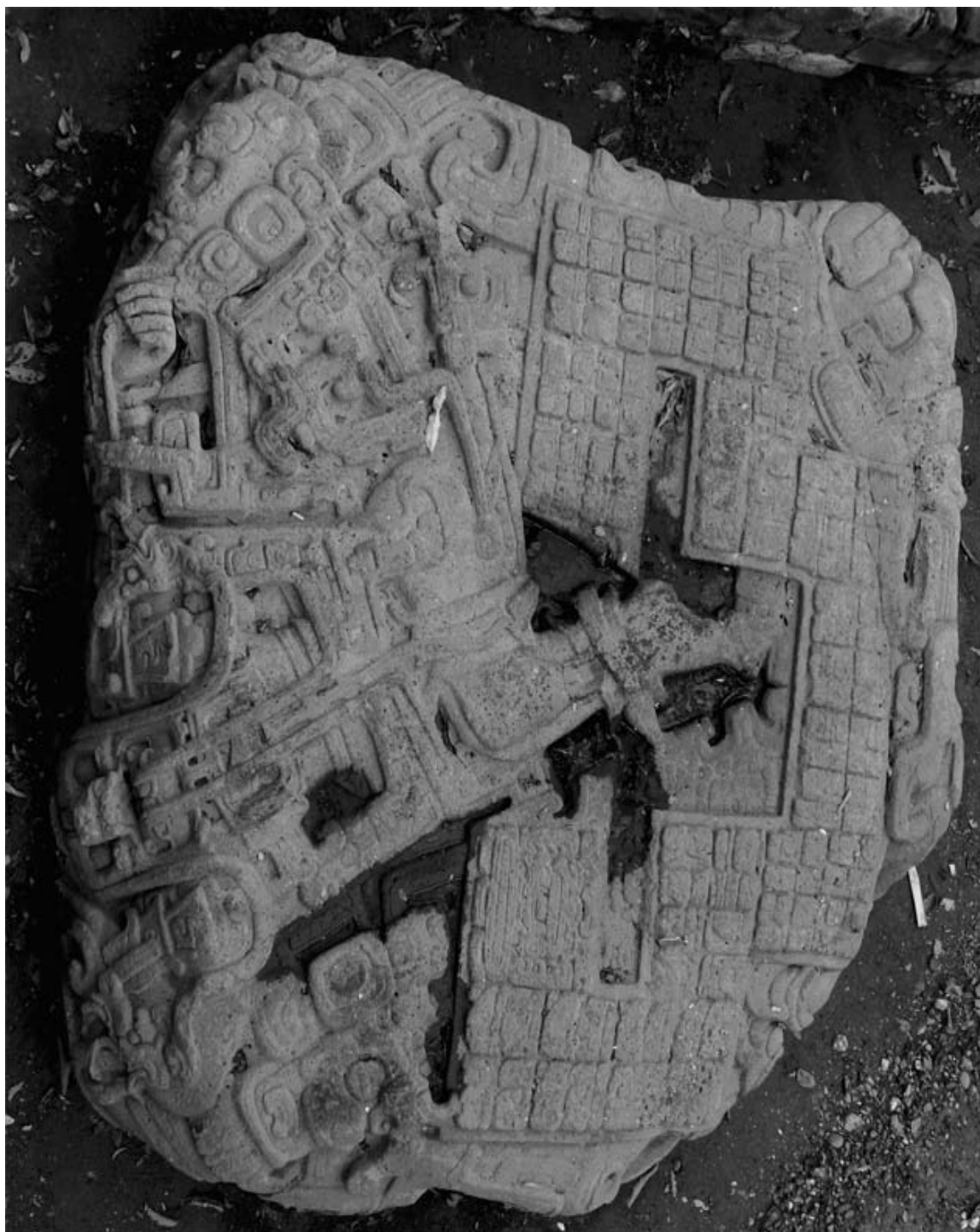


Figure III.47: Quirigua, Altar P' *in situ* (photo by Carl Callaway 2010).

K

L



Figure III.48: Quirigua, Altar P' text (K1-L2) *in situ* (Photo by Carl Callaway 2010).

M



N

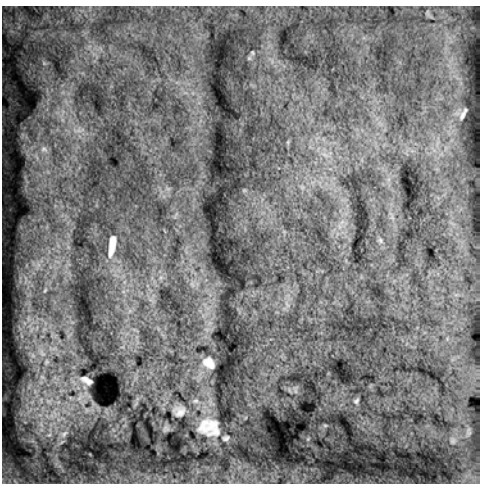
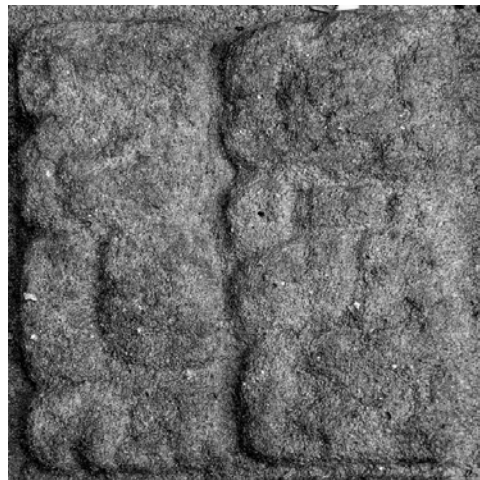


Figure III.49: Quirigua Altar P' text (M1-N2) *in situ* (photos by Carl Callaway 2010).

Q

R



Figure III.50: Quirigua, Altar P' text (Q1-R2) *in situ* (photos by Carl Callaway 2010).

A



b



Figure III.51a: Quirigua, Altar P' text (K1-M2) (photo by Giles Healey courtesy of University of Pennsylvania Museum of Archaeology and Anthropology); Figure III.51b: Quirigua, Altar P' text (L1-N2) (photo by Giles Healey courtesy of University of Pennsylvania Museum of Archaeology and Anthropology).



Figure III.52: Quirigua, Altar P' text (O1-P2 and Q1-R2) (photograph by Giles Healey courtesy of University of Pennsylvania Museum of Archaeology and Anthropology).

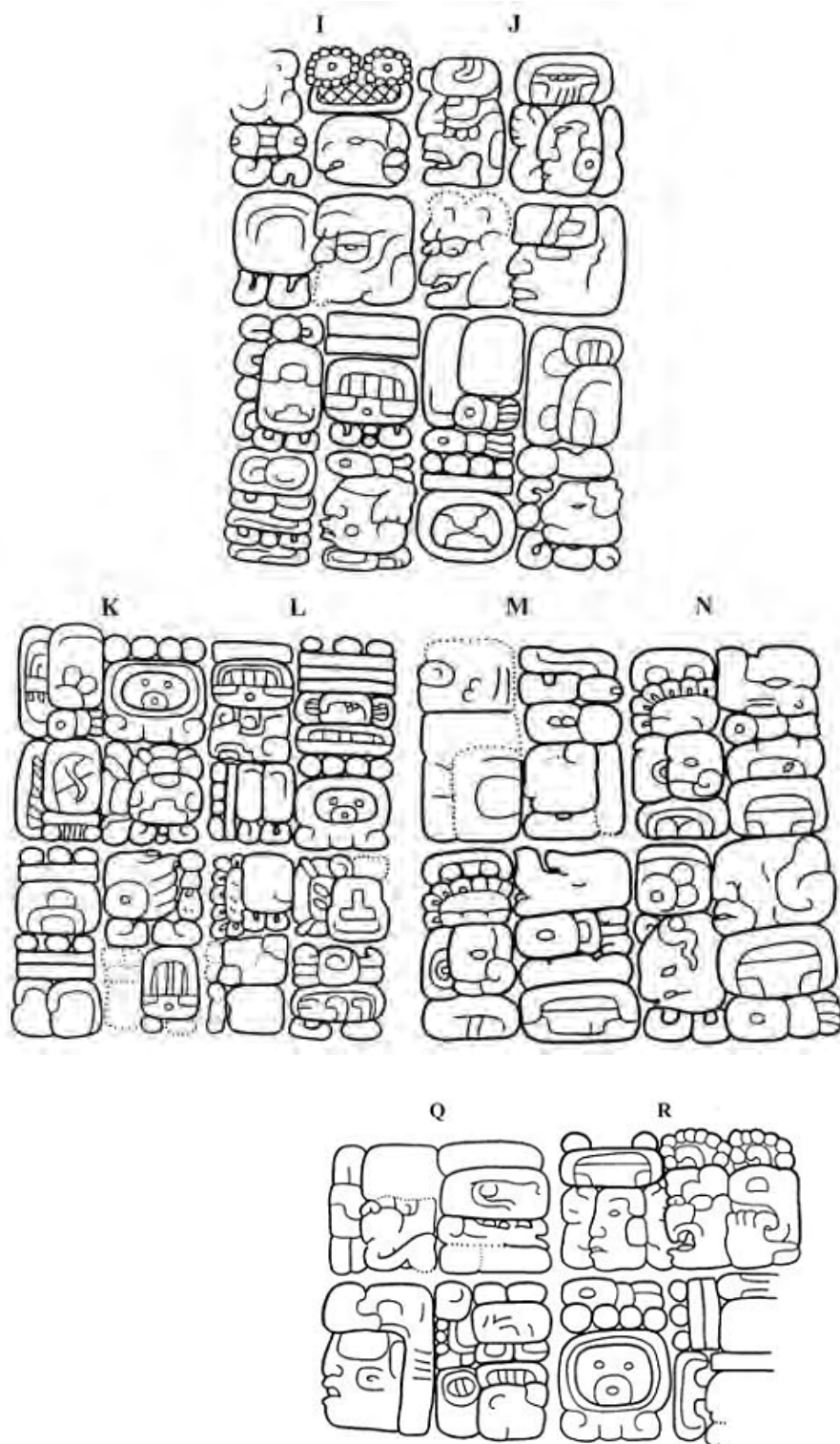


Figure III.53: Quirigua, Altar P' text (I1-N2 and Q1-R2) (drawings by MatthewLooper).

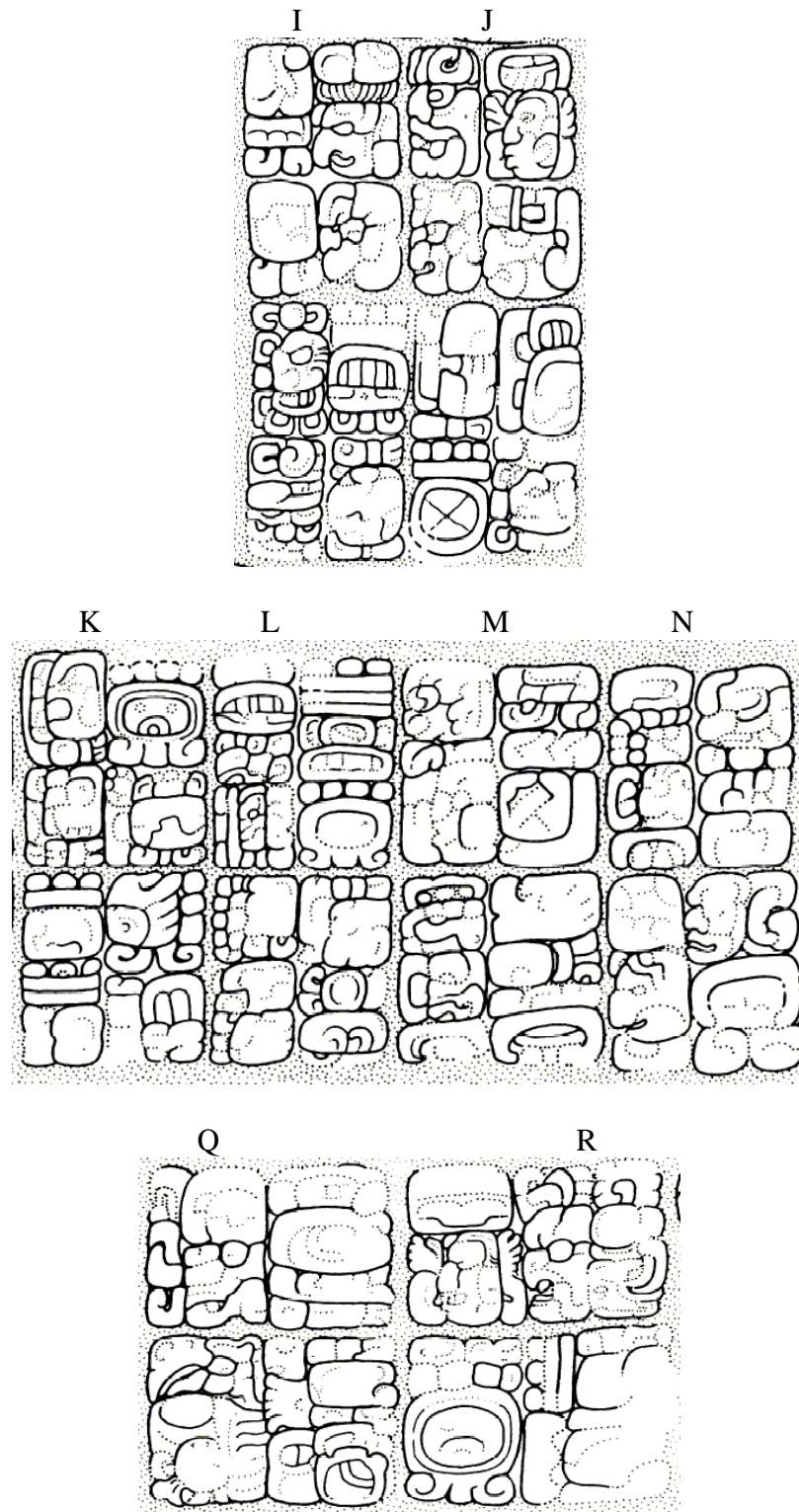


Figure III.54: Quirigua Altar P' text (I1-N2 and Q1-R2) (drawing by William R. Coe).



a



b

Figure III.55a: Quirigua, Zoomorph G, east side (Jesse Nusbaum Collection, Palace of the Governors Photo Archive, Santa Fe, photo 060854); Figure III.55b: Quirigua, initial text Zoomorph G (A1-P2) (Jesse Nusbaum Collection, Palace of the Governors Photo Archive, Santa Fe, photo 060854).



a



b

Figure III.56a: Quirigua, Zoomorph G east side text (Q1-T5) *in situ* (Jesse Nusbaum Collection, Palace of the Governors Photo Archive, Santa Fe, photo 60854); Figure III.56b: Quirigua, Zoomorph G text (Q1-T5) *in situ* (Jesse Nusbaum Collection, Palace of the Governors Photo Archive, Santa Fe, photo 132924).

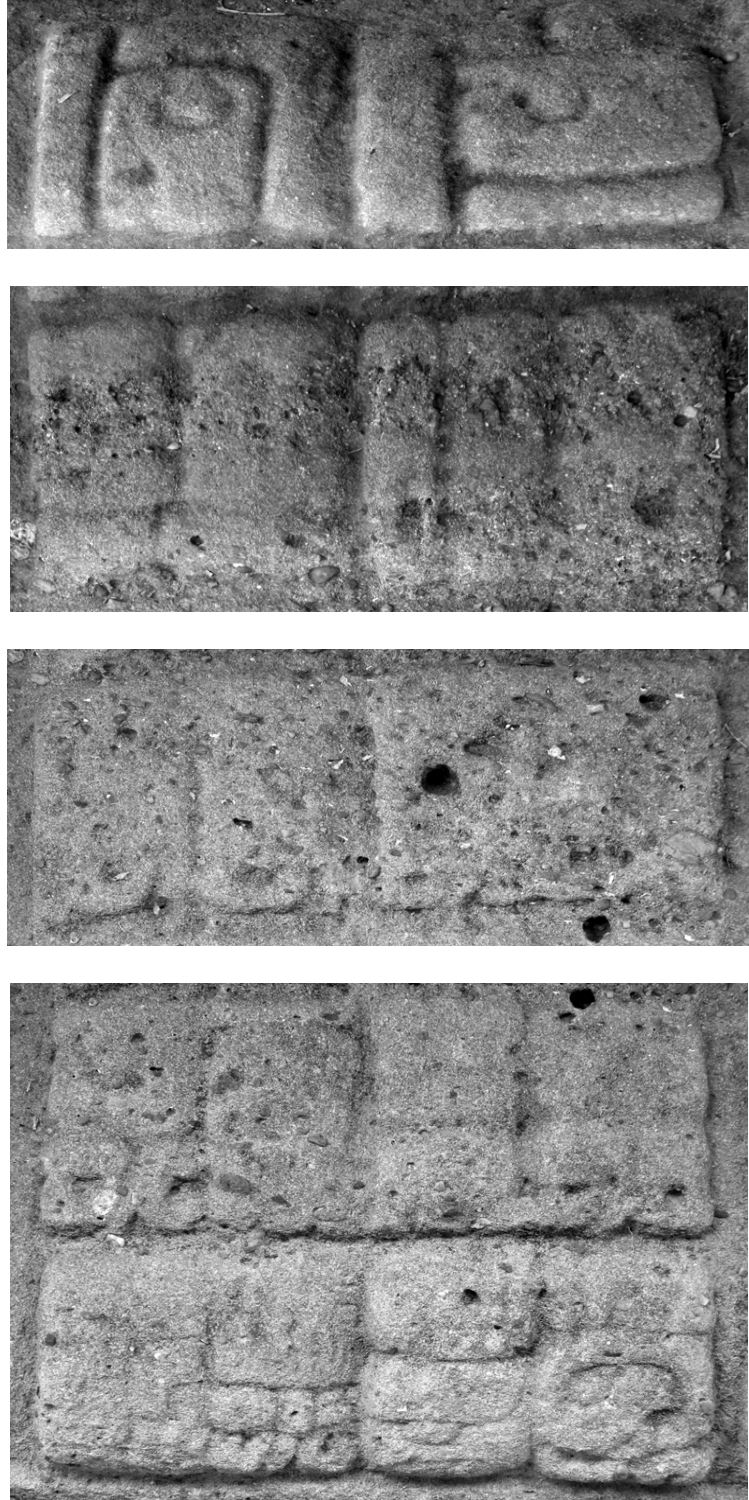


Figure III.57: Quirigua Zoomorph G, east side text (Q1-R5) *in situ* (photos by Carl Callaway 2010).

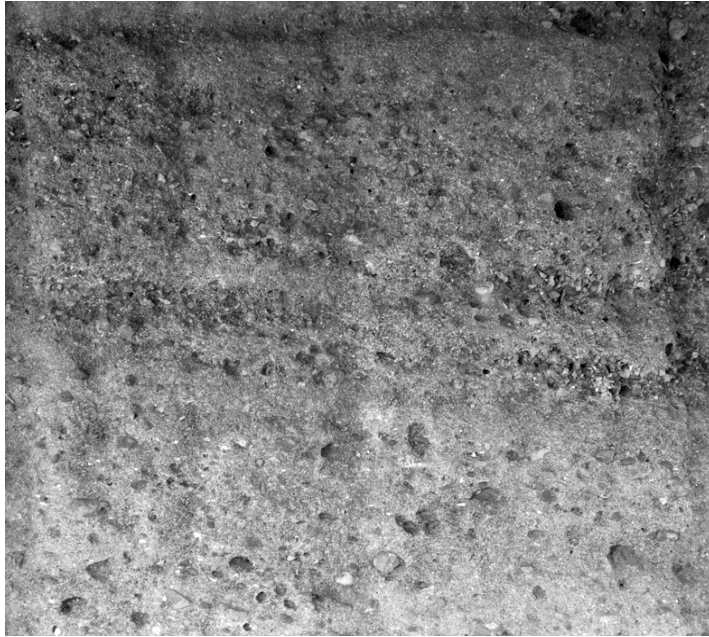
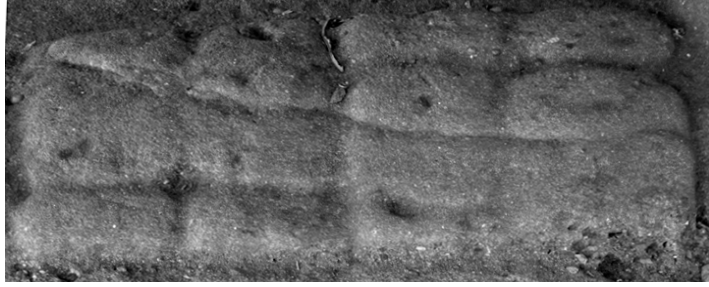


Figure III.58: Quirigua, Zoomorph G, east side text (S1-T5) *in situ* (photos by Carl Callaway 2010).

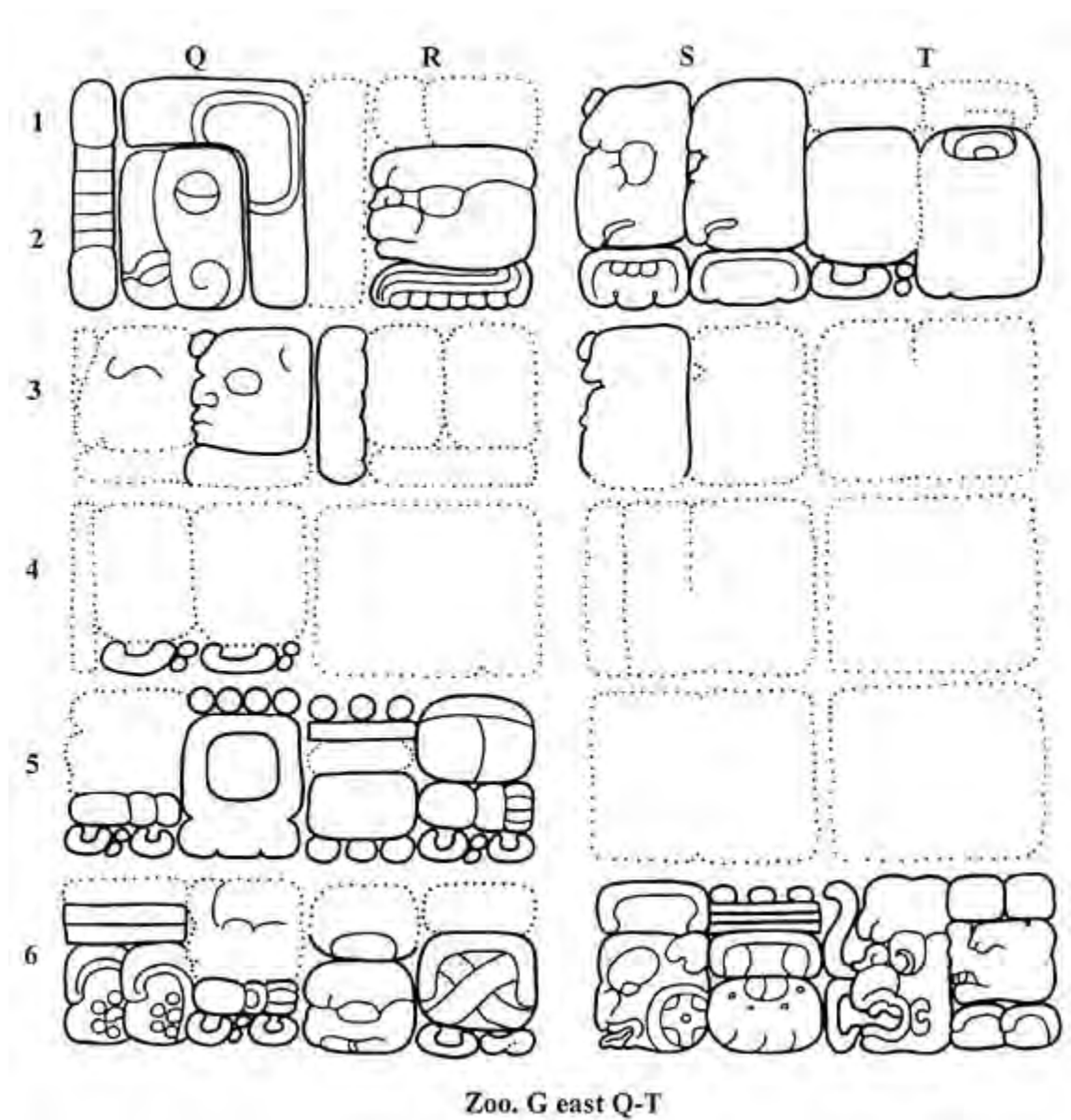


Figure III.59: Quirigua, Zoomorph G, east side text (Q1-T5) (drawing by Matthew Looper).

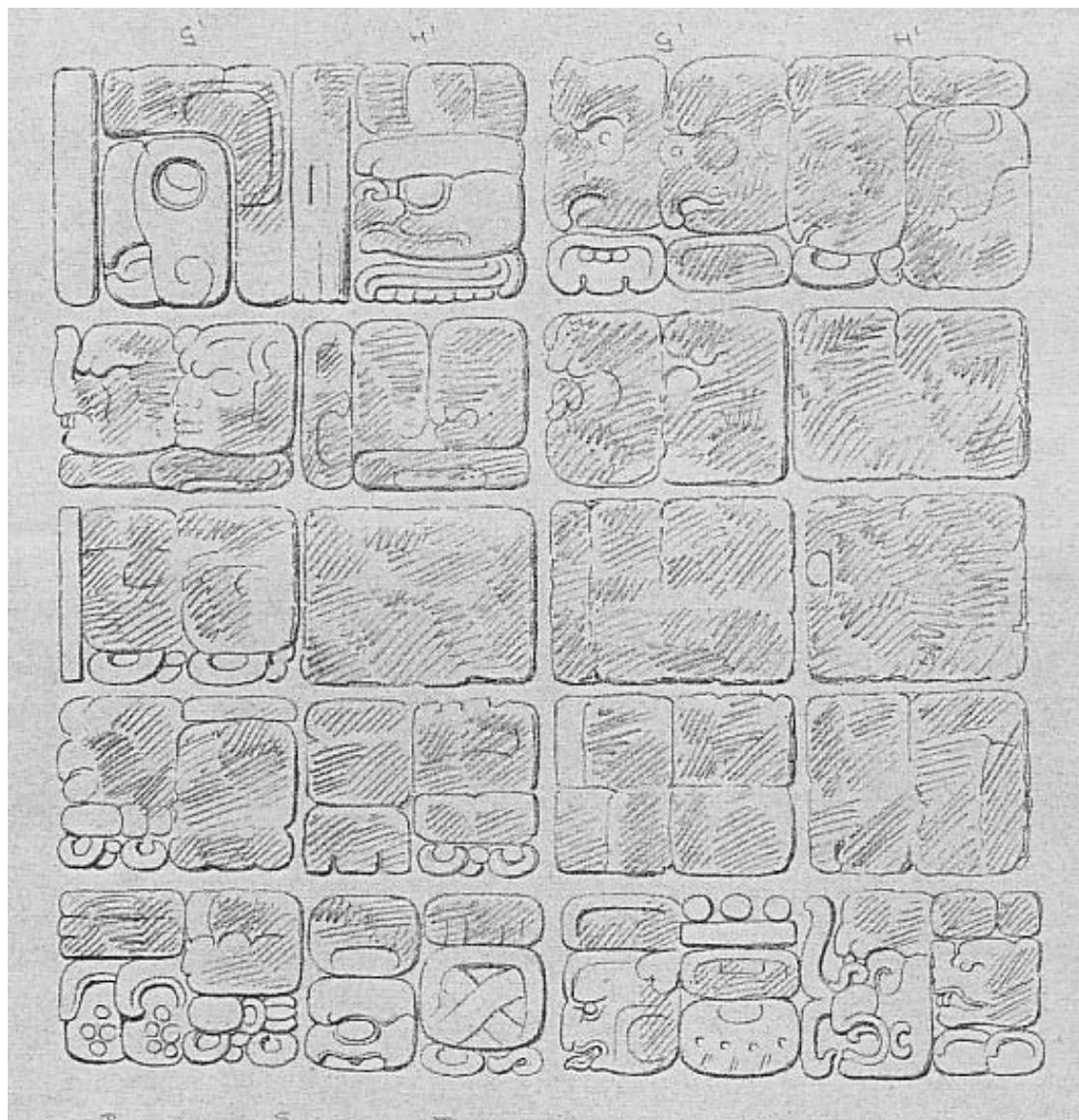


Figure III.60: Quirigua, Zoomorph G text, blocks Q1-T6 (drawing by Annie Hunter).



Figure III.61: Quirigua, Stela F, west side, blocks A15-B17 *in situ* (photo by Carl Callaway 2010).



Figure III.62: Quirigua, Stela F, west side, block B16 *in situ* (photo by Carl Callaway).



Figure III.63: Quirigua, Stela F, west side, blocks A15-B17 (drawing by MatthewLooper).



Figure III.64: Quirigua, Zoomorph P, south face *in situ* (Jesse Nusbaum Collection, Palace of the Governors, Santa Fe, photograph 060866).



Figure III.65: Quirigua, Zoomorph P, south text, blocks F2-M2 *in situ* (photo by Carl Callaway 2010).



Figure III.66: Quirigua, Zoomorph P, south text (M3a-M2a) of monument cast from Mexico City National Museum of Anthropology and History (photo by Carl Callaway 2010 courtesy of INAH).



Figure III.67: Quirigua, Zoomorph P, south text (M3a-M2a) of monument cast from the San Diego Museum of Man (photo by Carl Callaway 2010 courtesy of Museum of Man).

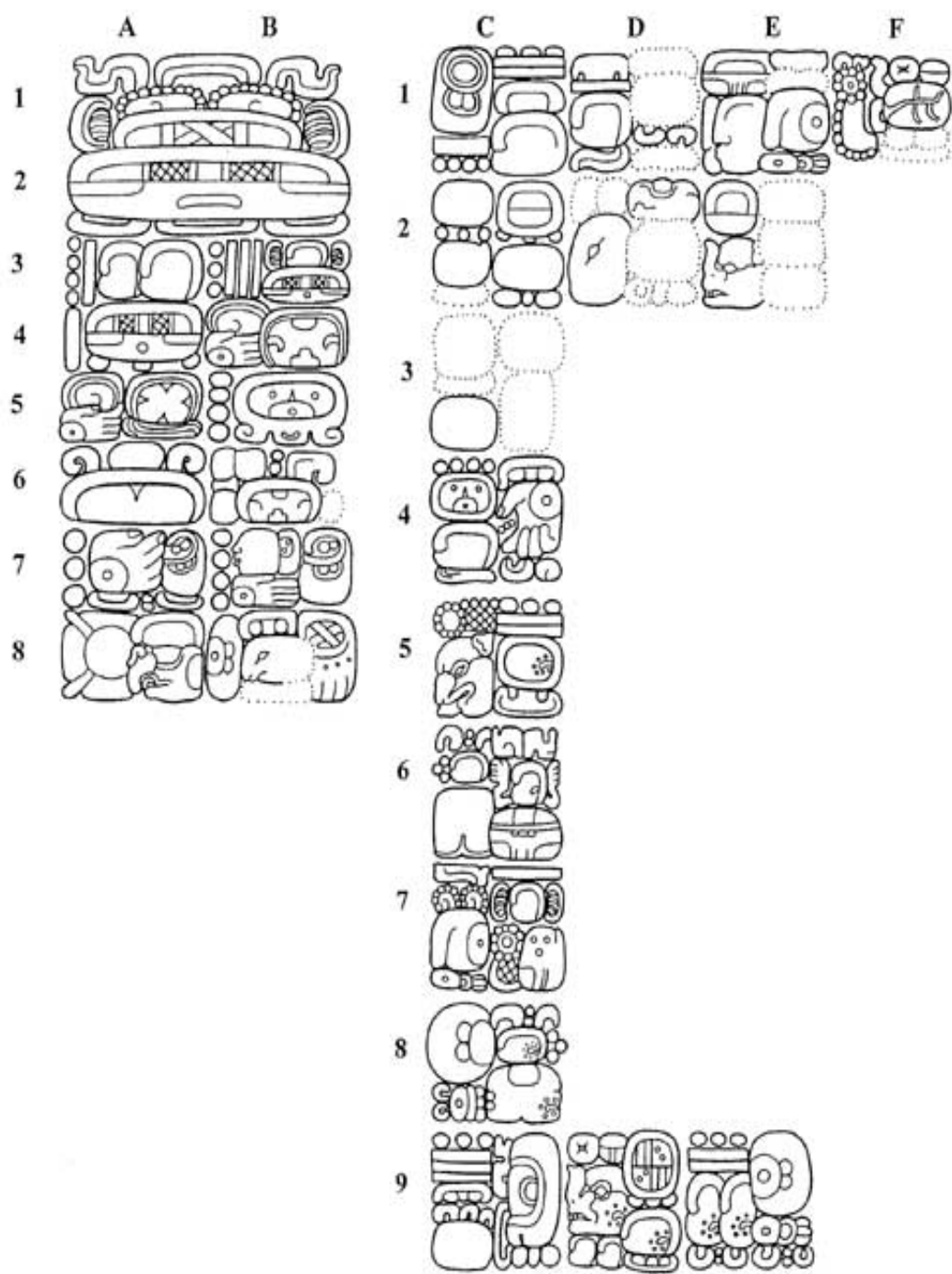


Figure III.68a: Quirigua, Zoomorph P, south text (A1-F1) (drawing by Matthew Looper).

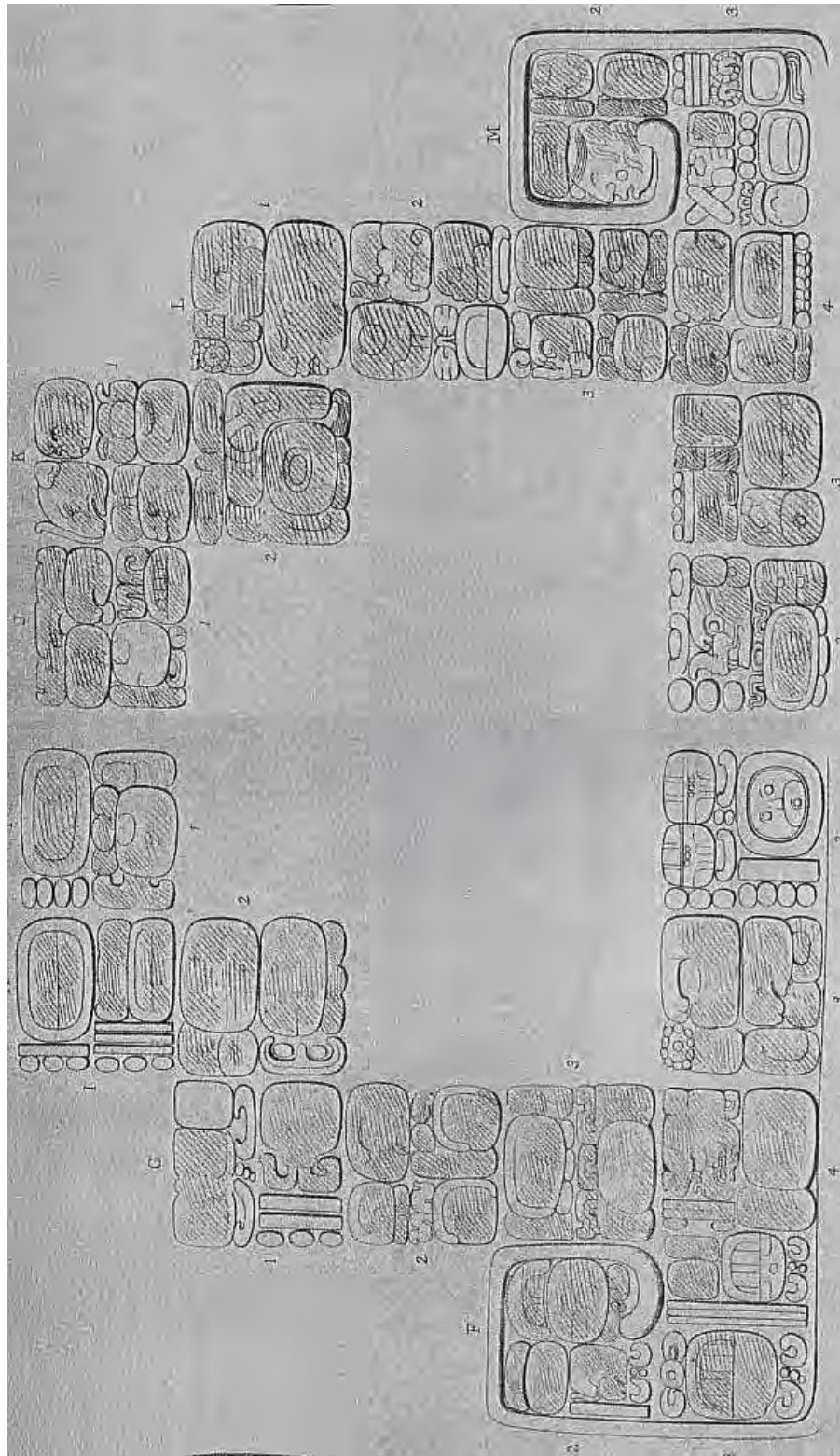


Figure III.68b: Quirigua, Zoomorph P, south text (F2-M2) (drawing by Annie Hunter in Maudslay 1889–1902).

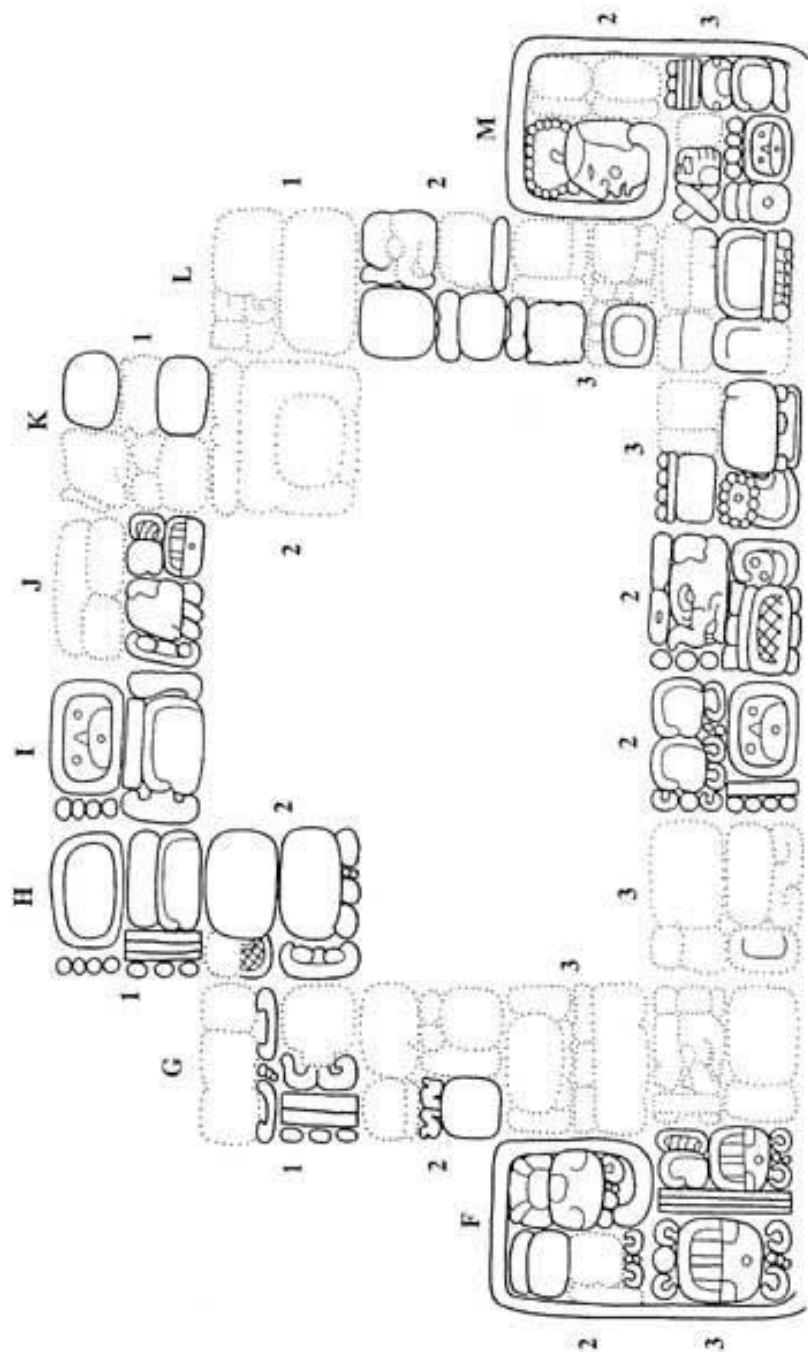


Figure III.69: Quirigua, Zoomorph P, south text (F2-M2) (drawing by Matthew Looper).



Figure III.70a: Quirigua, Zoomorph P, north side text, cartouche 11 *in situ* (photograph by Carl Callaway); Figure III.70b: Quirigua, Zoomorph P, north side text, cartouche 11 (drawing by Annie Hunter in Maudslay 1889–1902: Vol. II, Plate 63; Figure III.70c: Quirigua, Zoomorph P, north side text, cartouche 11 (drawing by Matthew Looper).

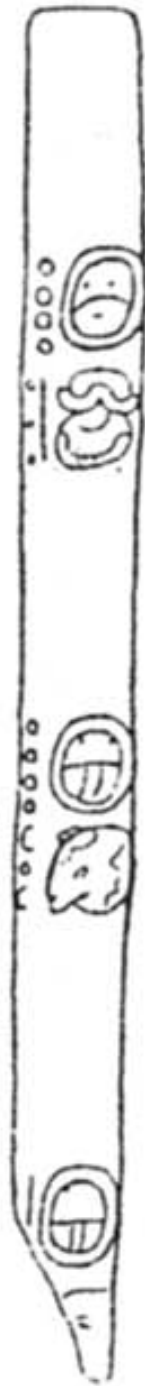


Figure III.71: Tikal Burial 116 Bone, MT-27 (drawing by Andy Seuffert).

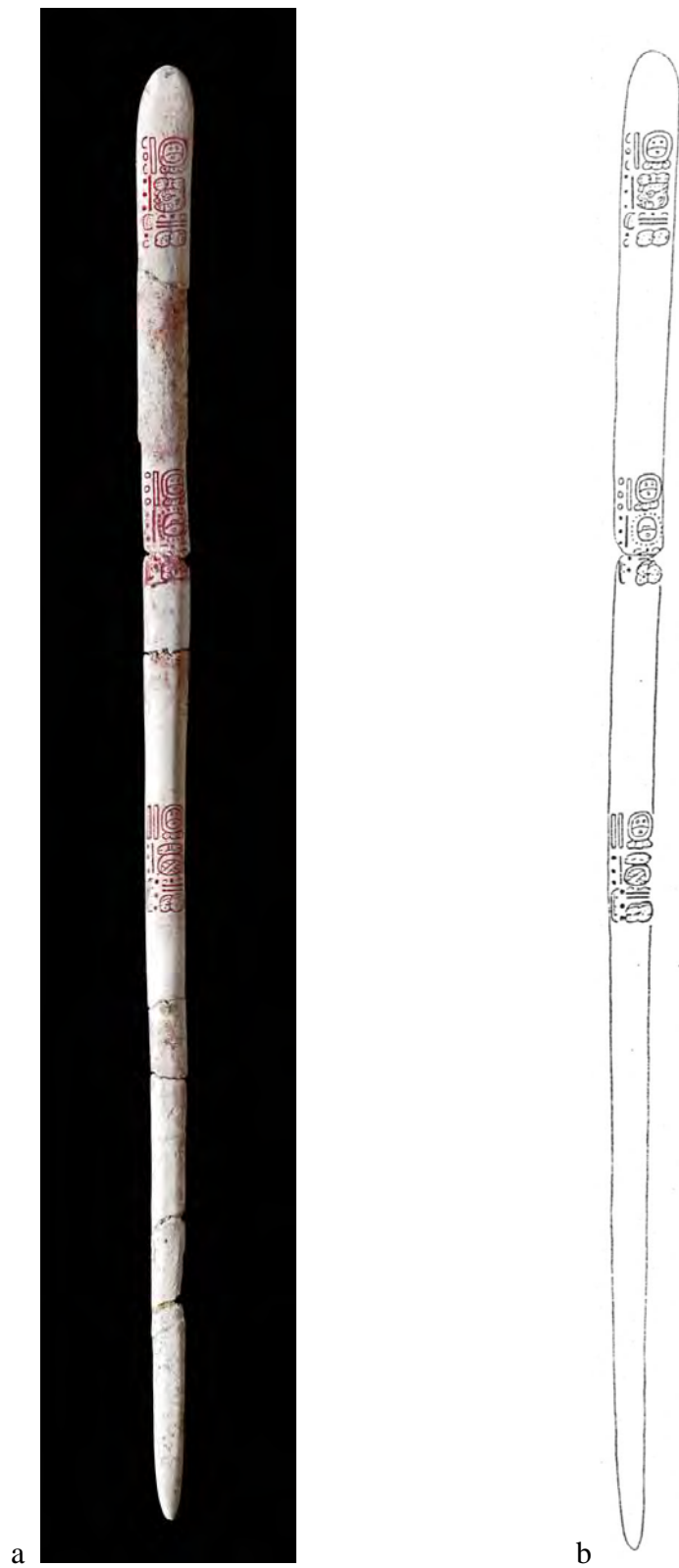


Figure III.72a Tikal Burial 116 Bone, MT-26 (photo by Paul Johnson); Figure III.72b Tikal Burial 116 Bone, MT-26 (drawing by Andy Seuffert).



Figure III.73a: Tikal Burial 116 Bone, MT-30A (photo by Paul Johnson); Figure III.73b: Tikal Burial 116 Bone, MT-30A; Figure III.73c: Tikal Burial 116 Bone, MT-29 (all drawings by Andy Seuffert).



Figure III.74: Map of Tikal Burial 116 Bone Cache (photo of map by Carl Callaway and digitally enhanced by Paul Johnson; map courtesy of the University of Pennsylvania Museum of Archaeology and Anthropology).

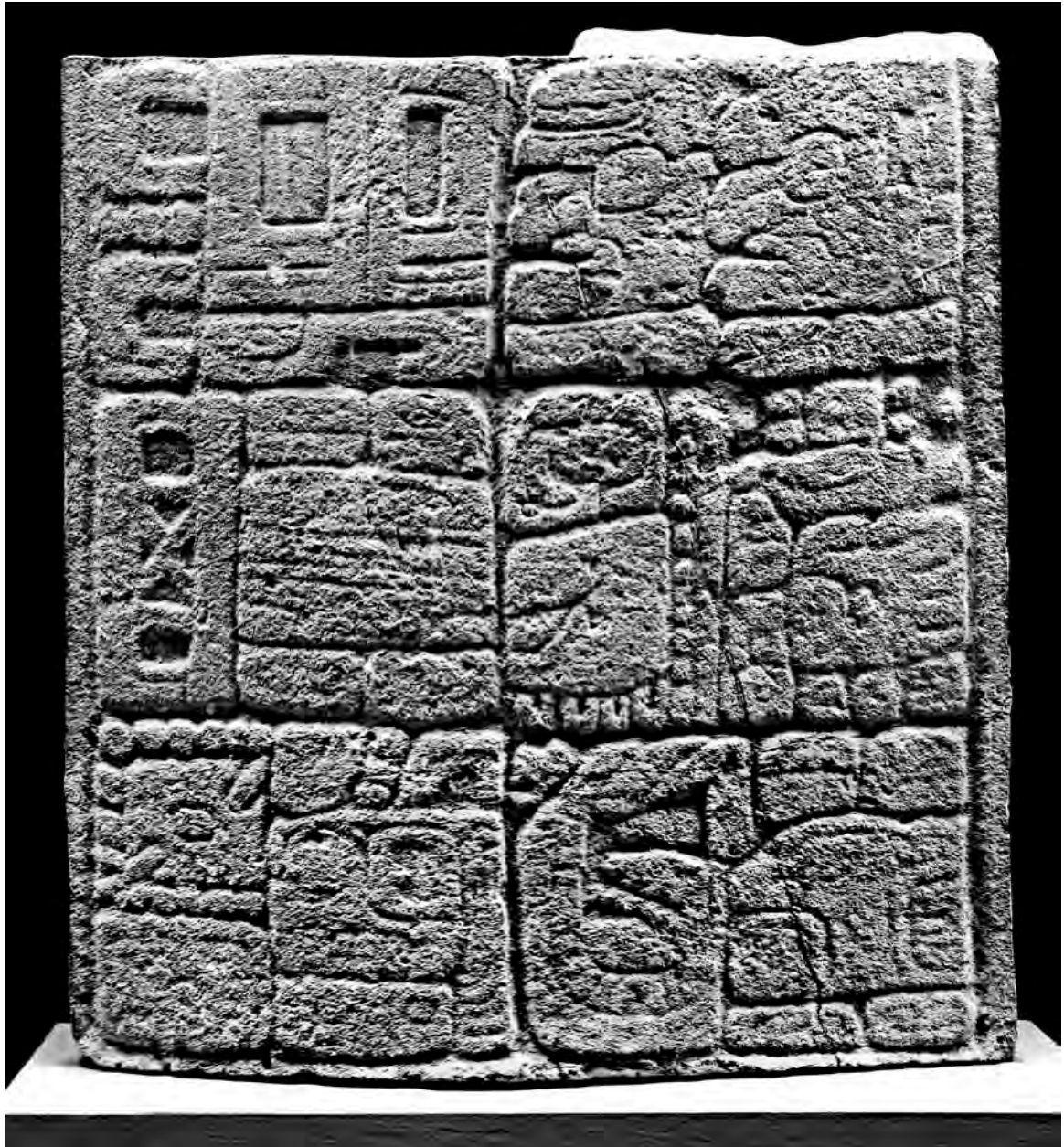


Figure III.75: “Tila” Stela A text (A7-B10) (photo by Carl Callaway and digitally enhanced by Paul Johnson).



Figure III.76a: “Tila” Stela A text (A1-B10) (drawing after Beyer 1927:124, fig. 1);

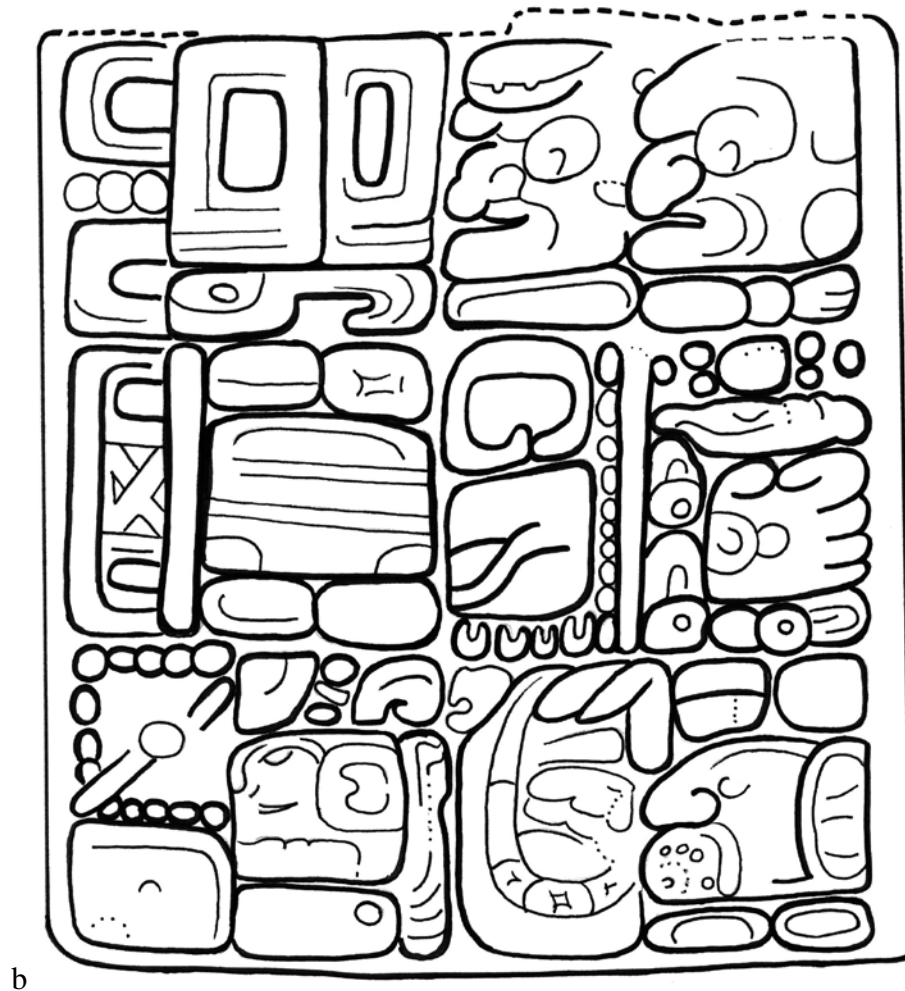


Figure III.76b: “Tila” Stela A text (A8-B10) (drawing by Carl Callaway).



Figure III.77: Tonina Monument 150, back (photo by Carl Callaway).

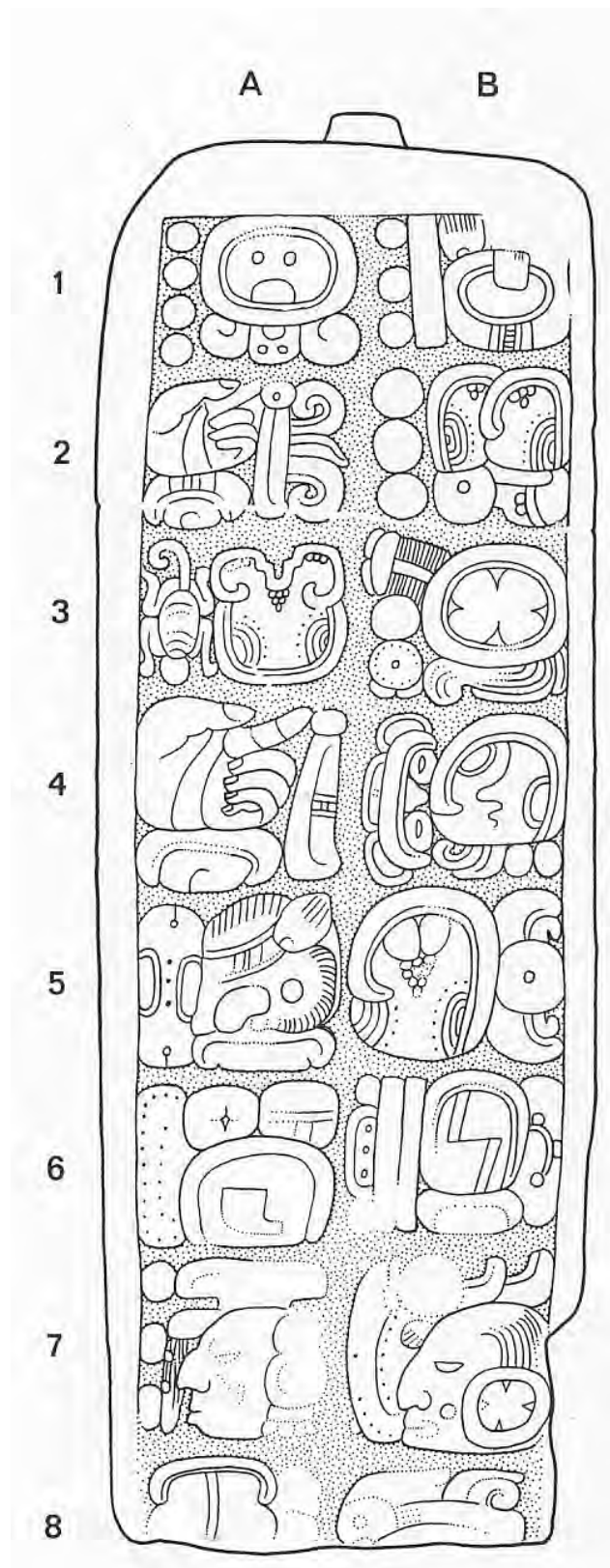


Figure III.78: Tonina Monument 150, back (drawing by Ian Graham).

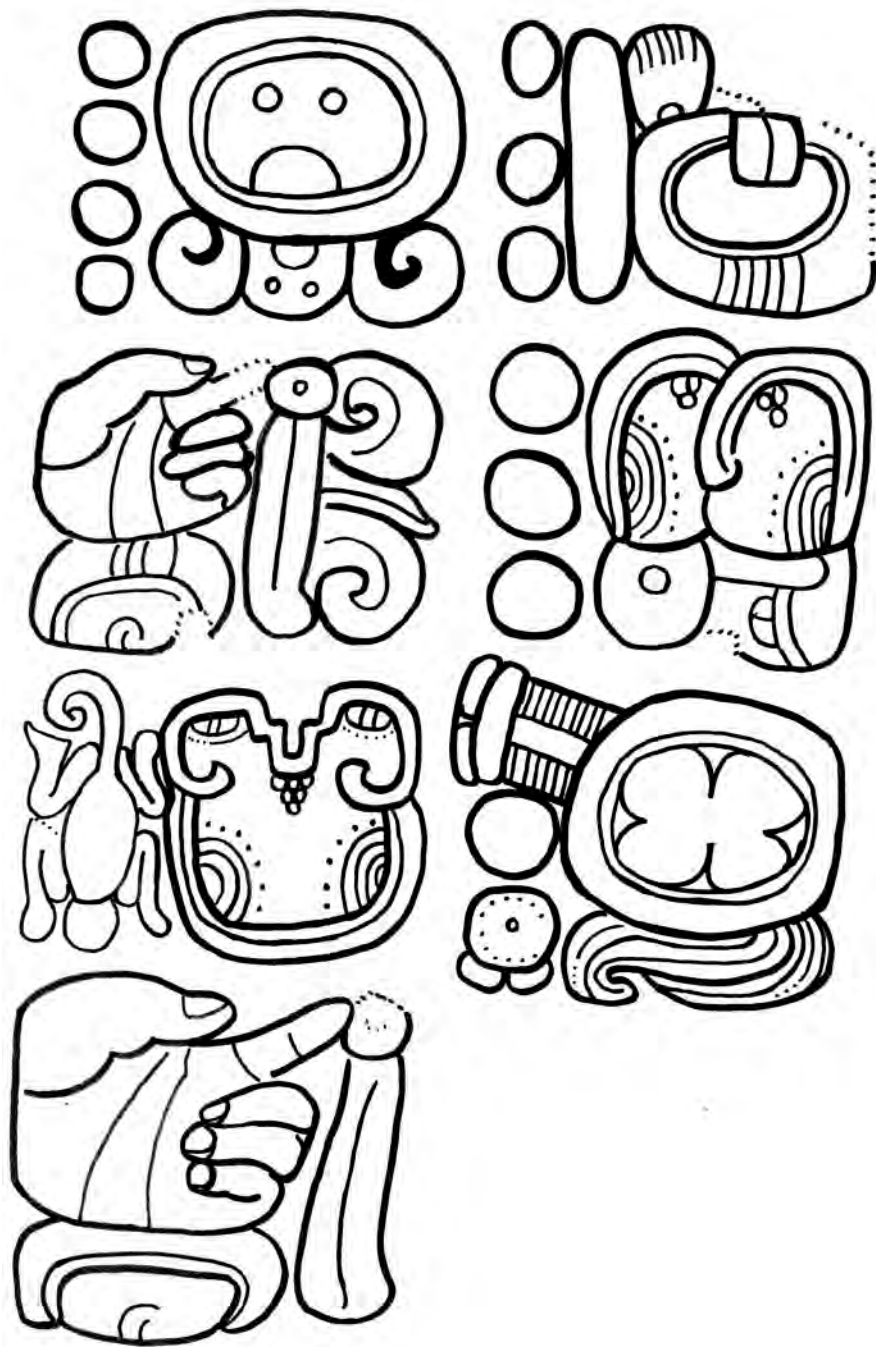


Figure III.79: Tonina Monument 150 text (A1-A4) (drawing by Carl Callaway).



Figure III.80: Tonina Monument 34 (photo by Carlos Pallan with digital adjustments made by Paul Johnson).

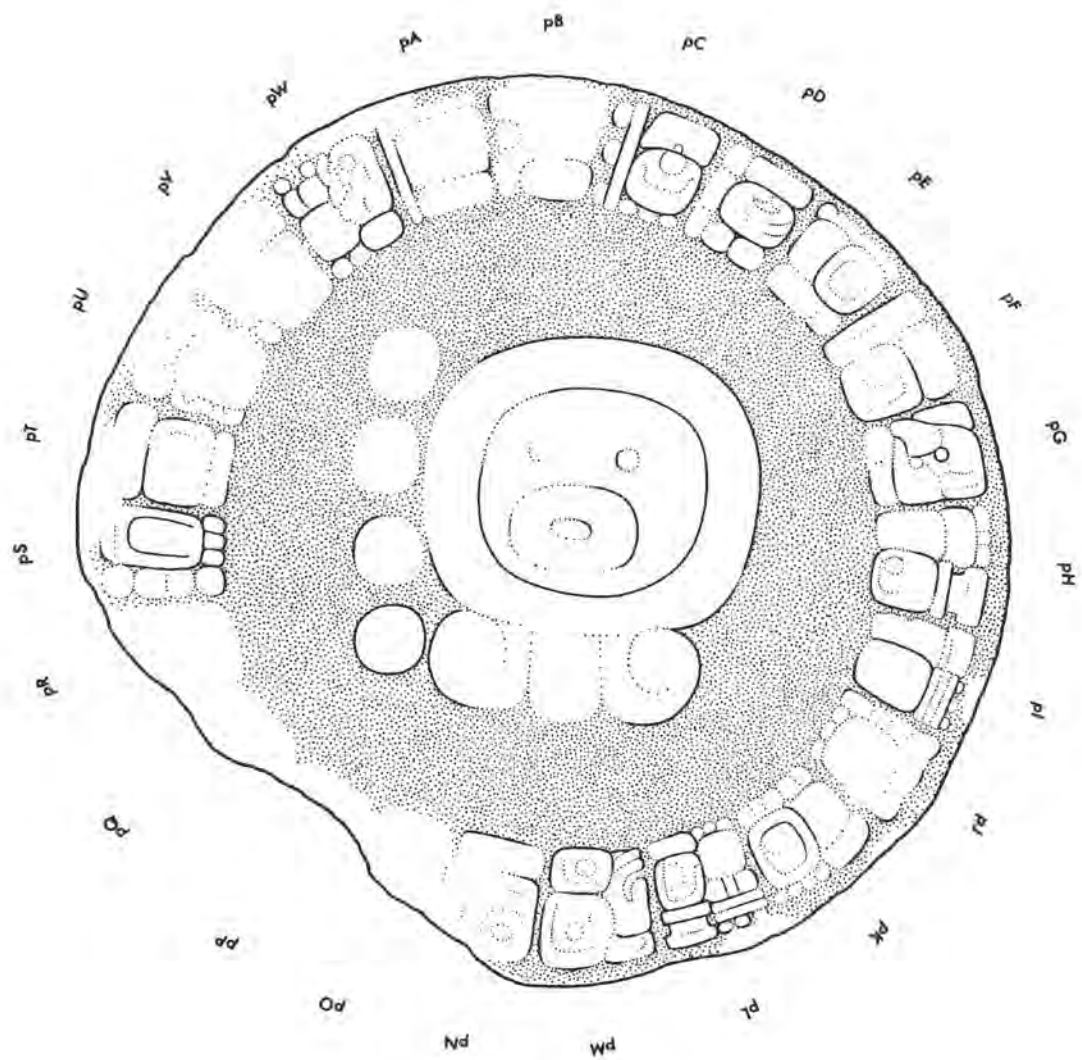


Figure III.81: Tonina Monument 34 (drawing by David Stuart).

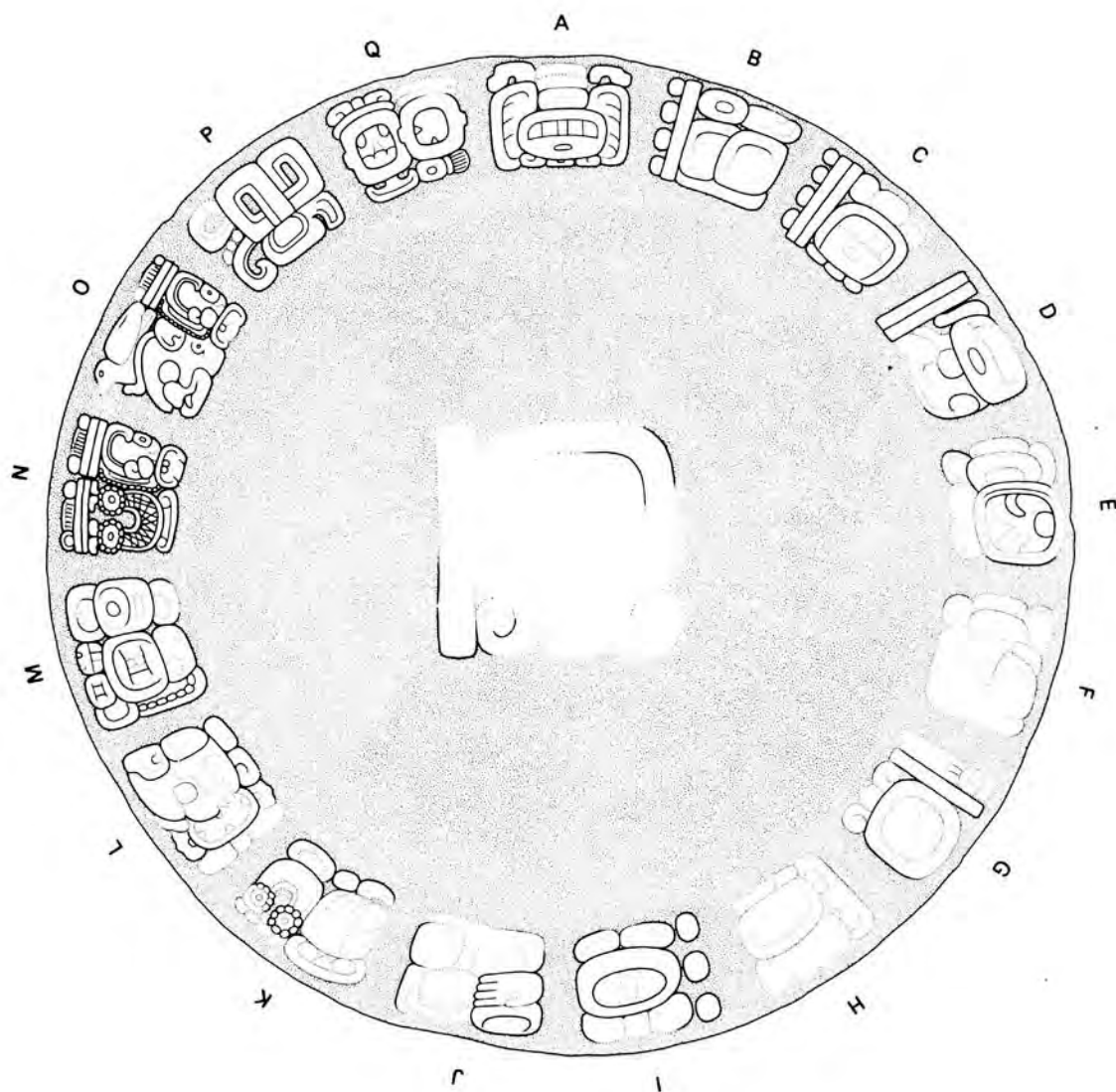


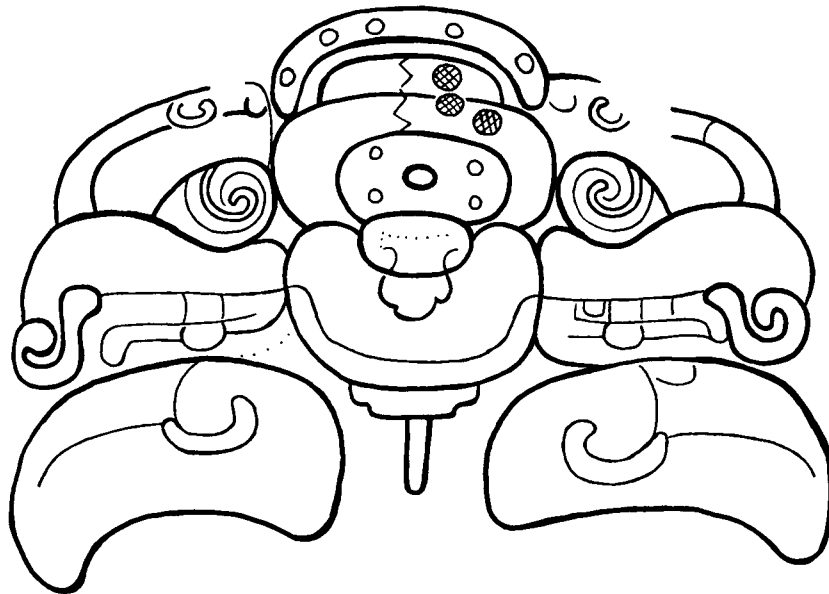
Figure III.82: Tonina Monument 110 (drawing by Peter Mathews).



Figure III.83: “Yax Wayib” Mask, front (photo by Carl Callaway courtesy of private collector Santa Fe, New Mexico).



a



b

Figure III.84a: Digitally enhanced photo of the “Yax Wayib” Mask headdress (a split image merged from two separate photos by Carl Callaway with digital enhancements by Paul Johnson). Figure III.84b: Drawing of the “Yax Wayib” Mask headdress (drawing by Carl Callaway).



Figure III.85: “Yax Wayib” Mask back (photo by Carl Callaway courtesy of private collector Santa Fe, New Mexico).



Figure III.86a: “Yax Wayib” Mask back, Columns A and B (photo and drawing by Carl Callaway courtesy of private collector Santa Fe, New Mexico).



Figure III.87: “Yax Wayib” Mask back, Columns C and D (photo and drawing by Carl Callaway courtesy of private collector Santa Fe, New Mexico).



Figure III.88: “Yax Wayib” Mask back, Columns E and F (photo and drawing by Carl Callaway courtesy of private collector Santa Fe, New Mexico).

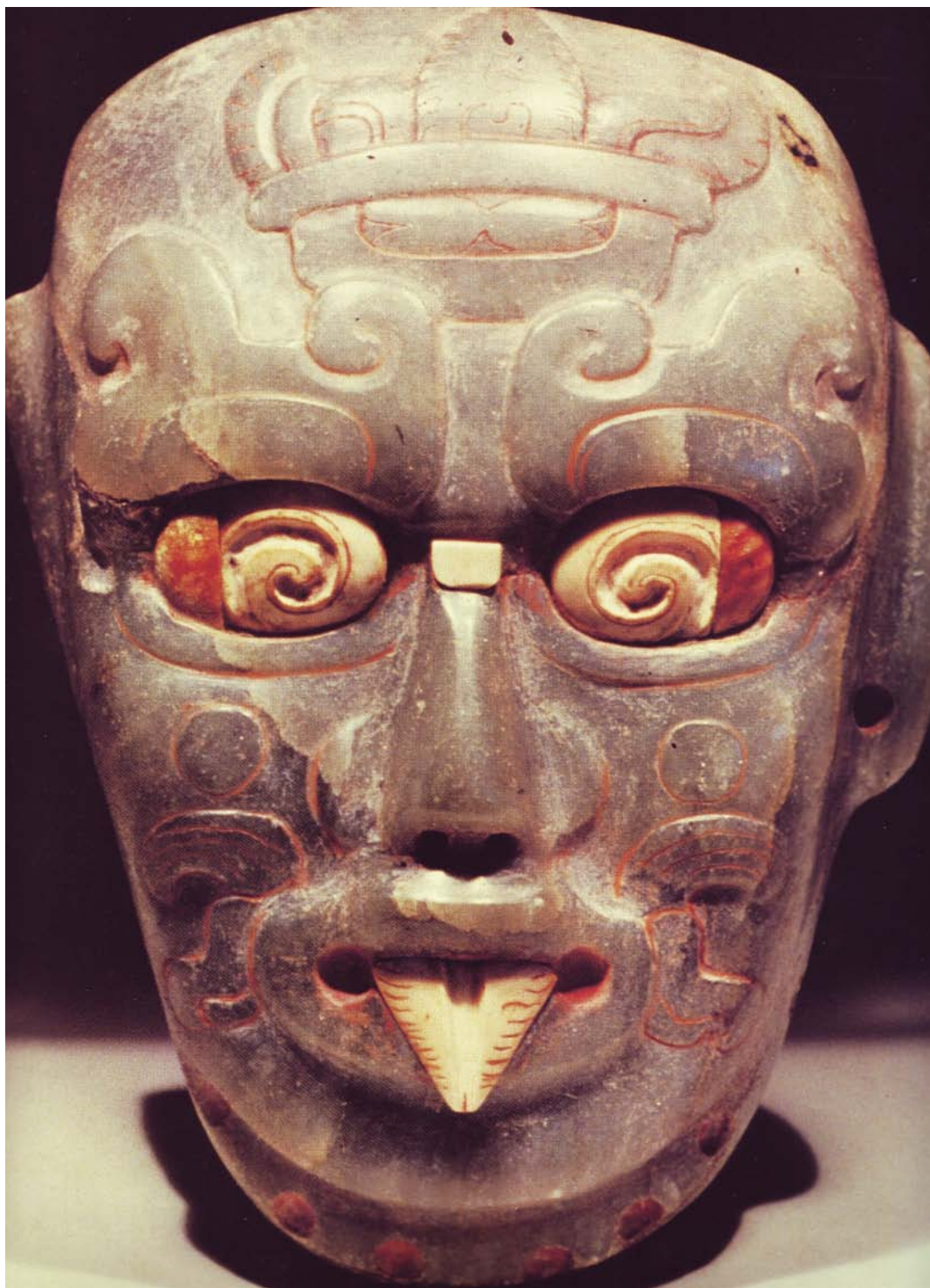


Figure III.89: Río Azul "Sak Balam" Mask front (photo by Justin Kerr after Coe 1997:44).

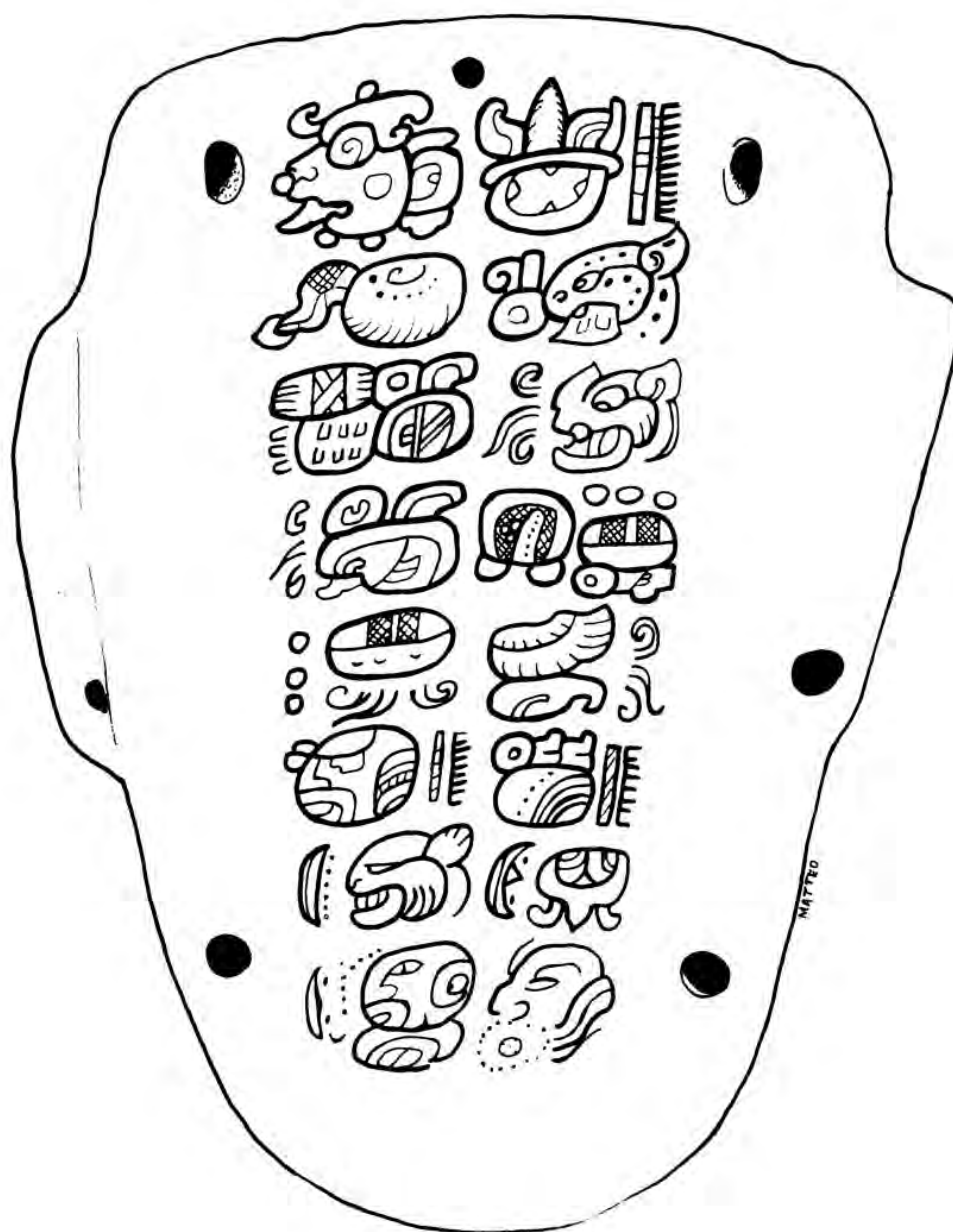
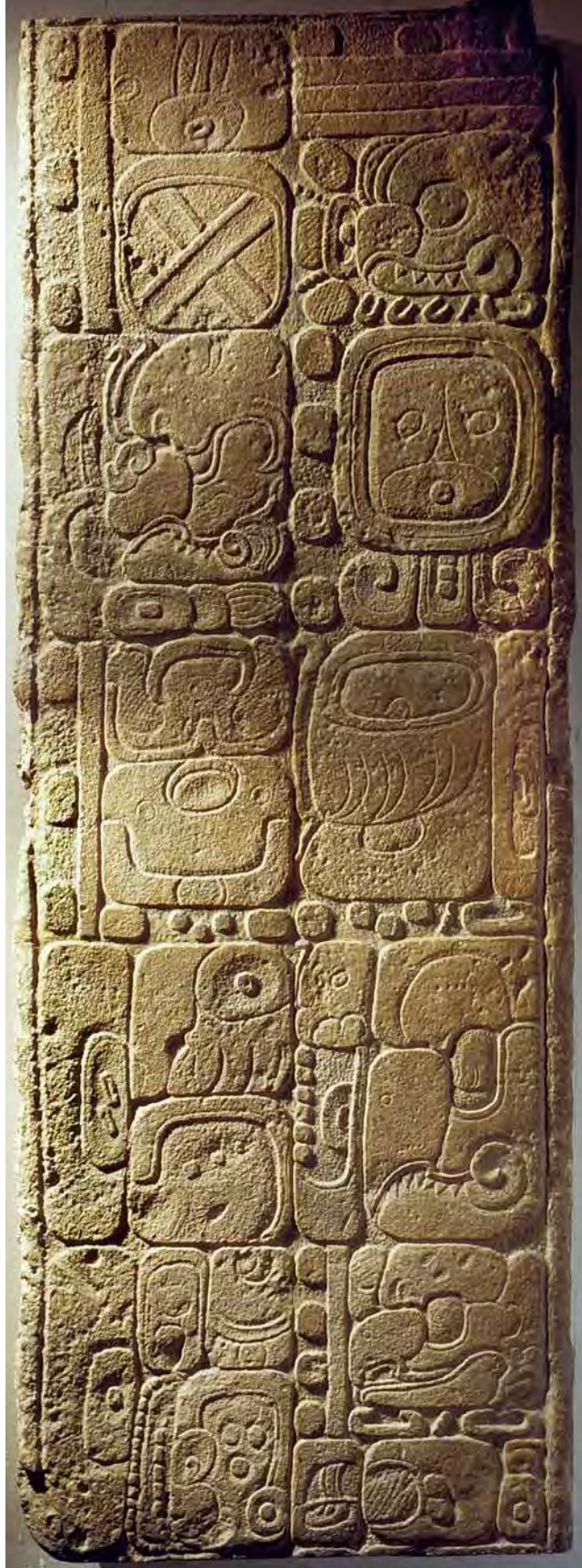


Figure III.90: Río Azul “Sak Balam” Mask back (drawing by Sebastian Matteo).



Photograph © Justin Kerr K5022

Figure III.91: Kerr Vase 5022 (Photograph © Justin Kerr K5022).



Photograph © Justin Kerr Panel 6593

Figure III.92: Panel 6593 (Photograph © Justin Kerr Panel 6593).

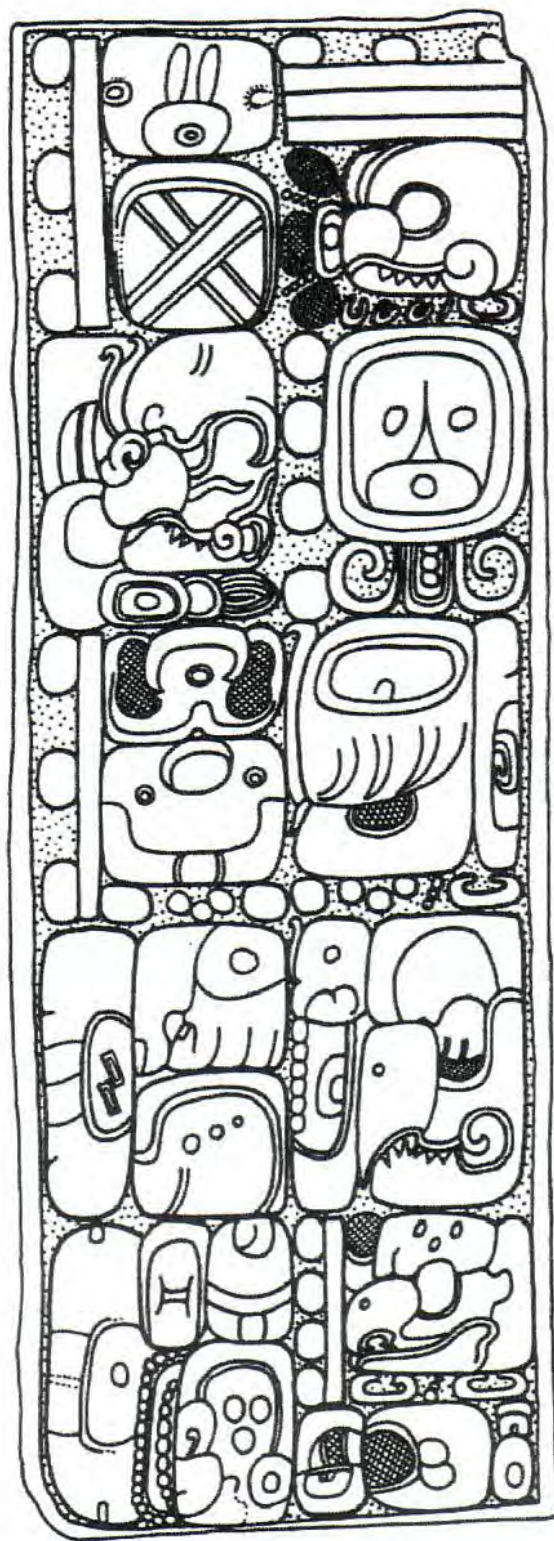


Figure III.93: Panel 6593 (drawing by Christian Prager courtesy of WAYEB).

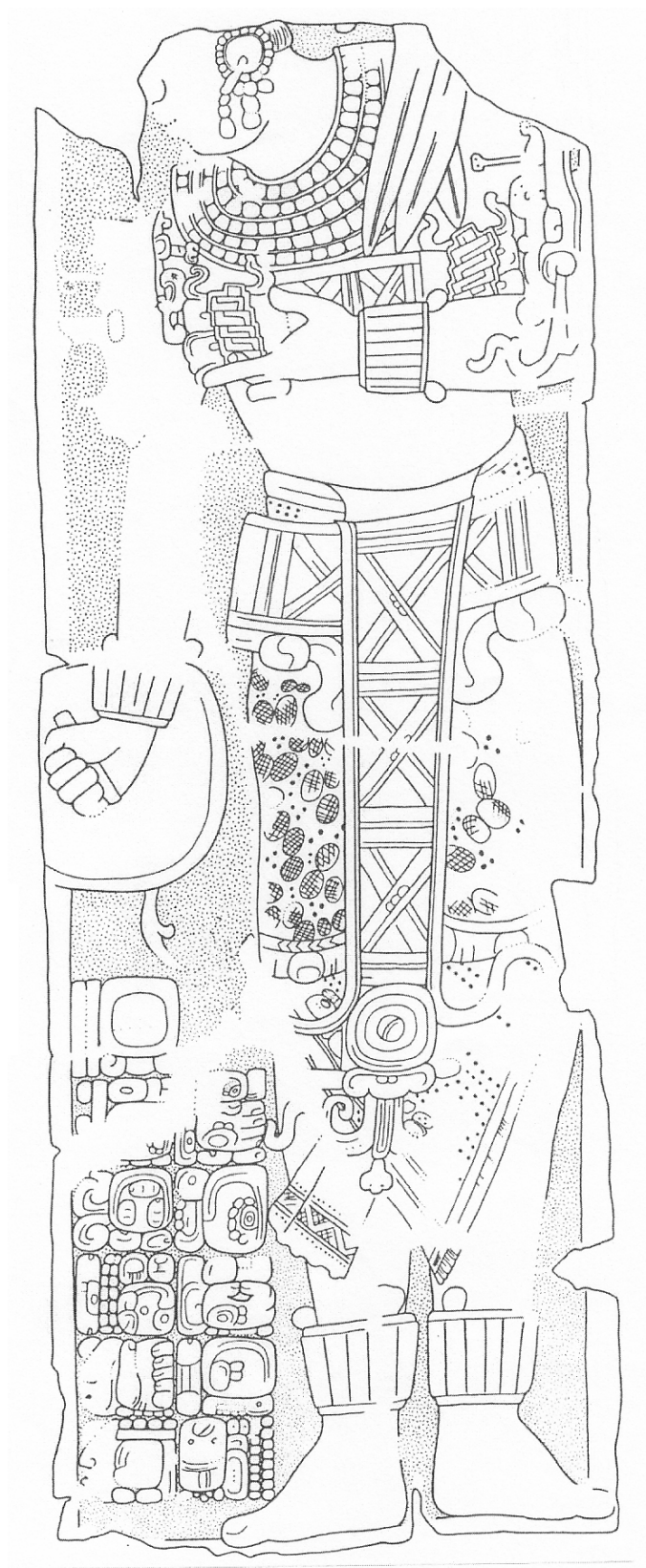


Figure III.94: Dumbarton Oaks Panel Number 4 (drawing by David Stuart).

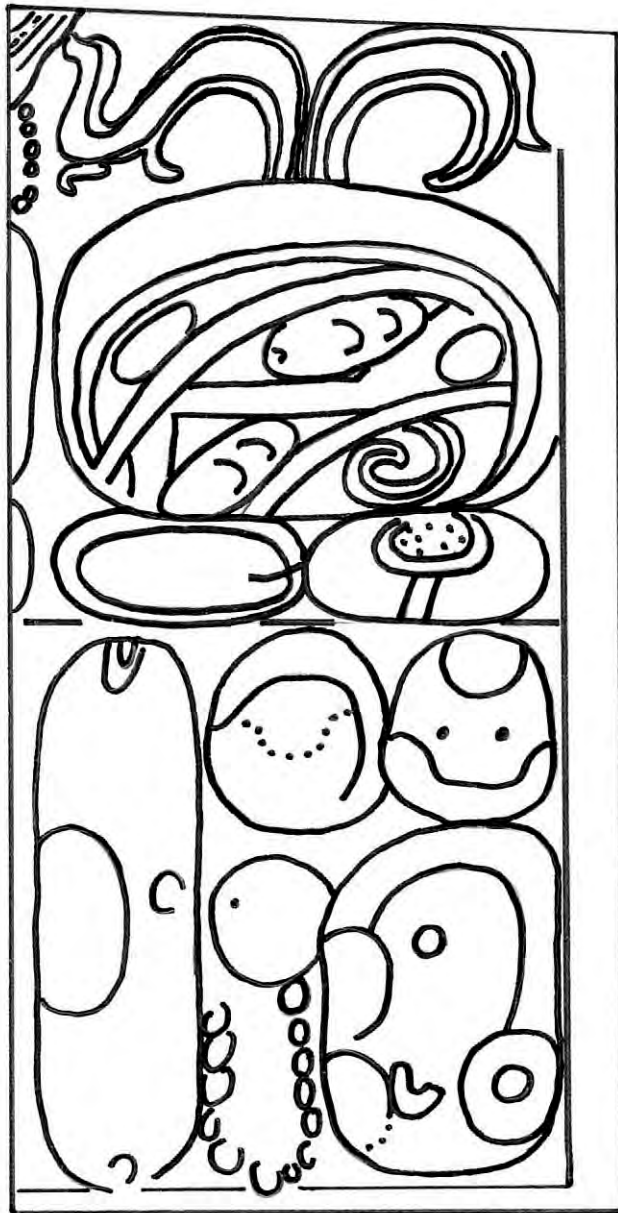


Figure III.95: Fragment of Text, Guy Dixon Collection, England (drawing by Carl Callaway after a sketch by Ian Graham).

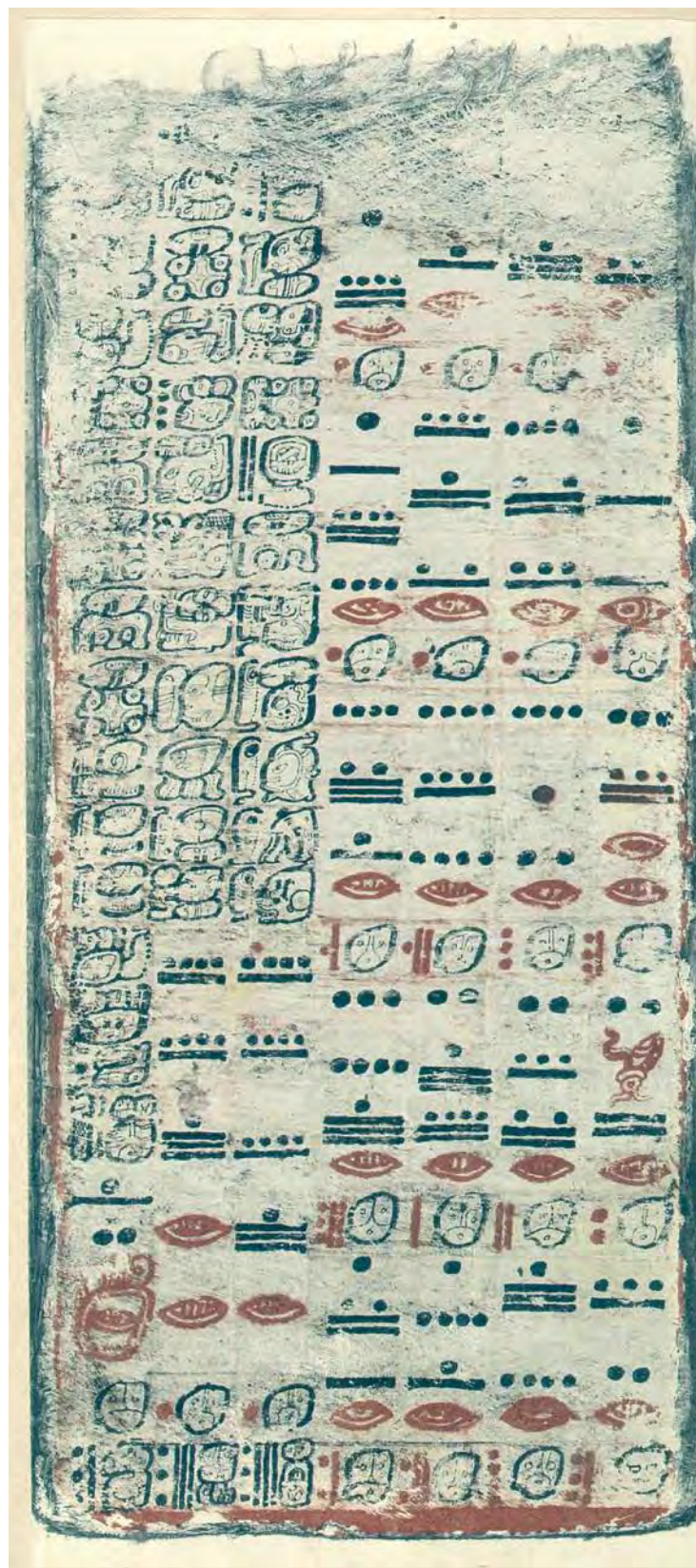


Figure III.96: Dresden Codex page 24 (after Förstemann 1880 photo courtesy of FAMSI).



Figure III.97a: Lanced figure of “wounded” god from the Dresden Codex Venus Almanac, page 46, Section c; Figure III.97b: Lanced figure of “wounded” god from the Dresden Codex Venus Almanac, page 47, Section c; Figure III.97c: Lanced figure of “wounded” god from the Dresden Codex Venus Almanac, page 48, Section c; Figure III.97d: Lanced figure of “wounded” god from the Dresden Codex Venus Almanac page 49, Section c; Figure III.97e: Lanced figure of “wounded” god from the Dresden Codex Venus Almanac page 50 Section c (all photos after Förstemann 1880 photo courtesy of FAMSI).

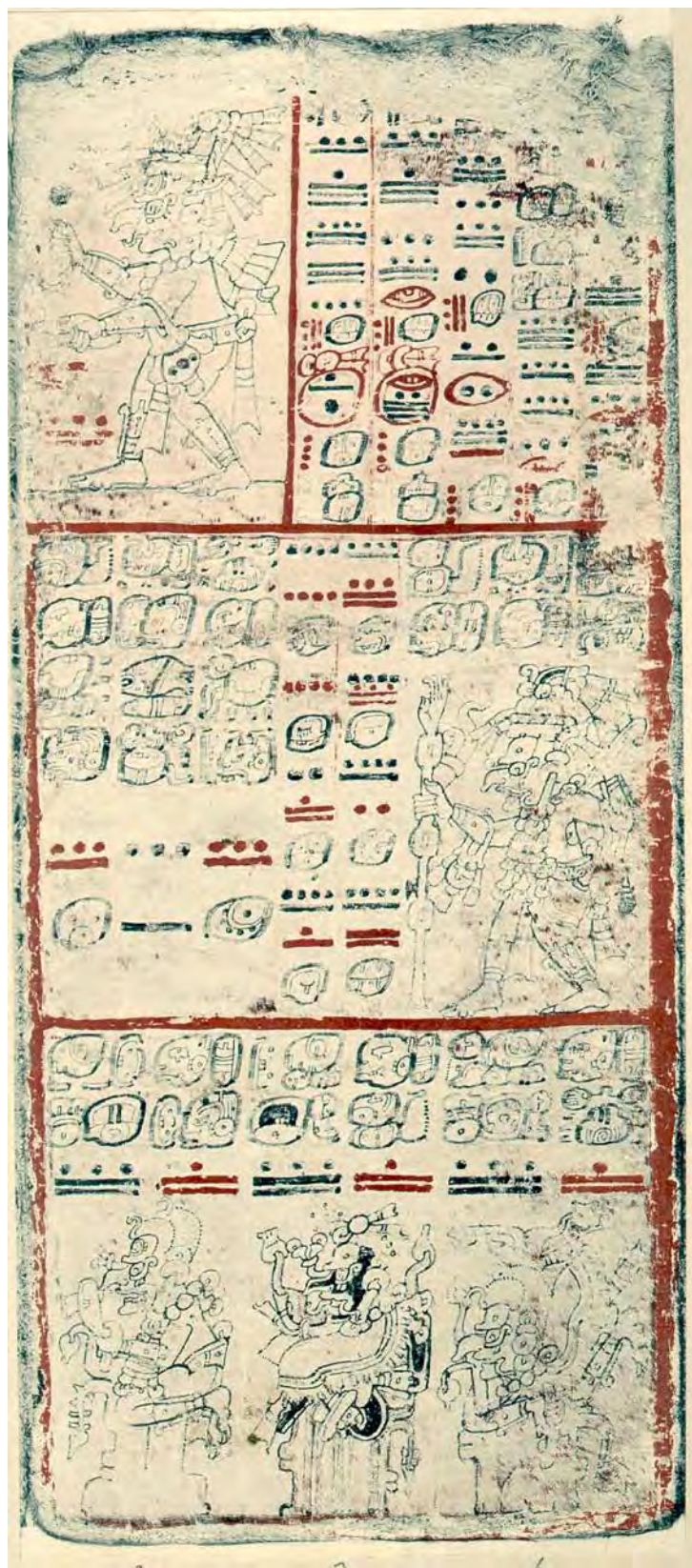


Figure III.98: Dresden Codex page 31 (after Förstemann 1880 photo courtesy of FAMSI).

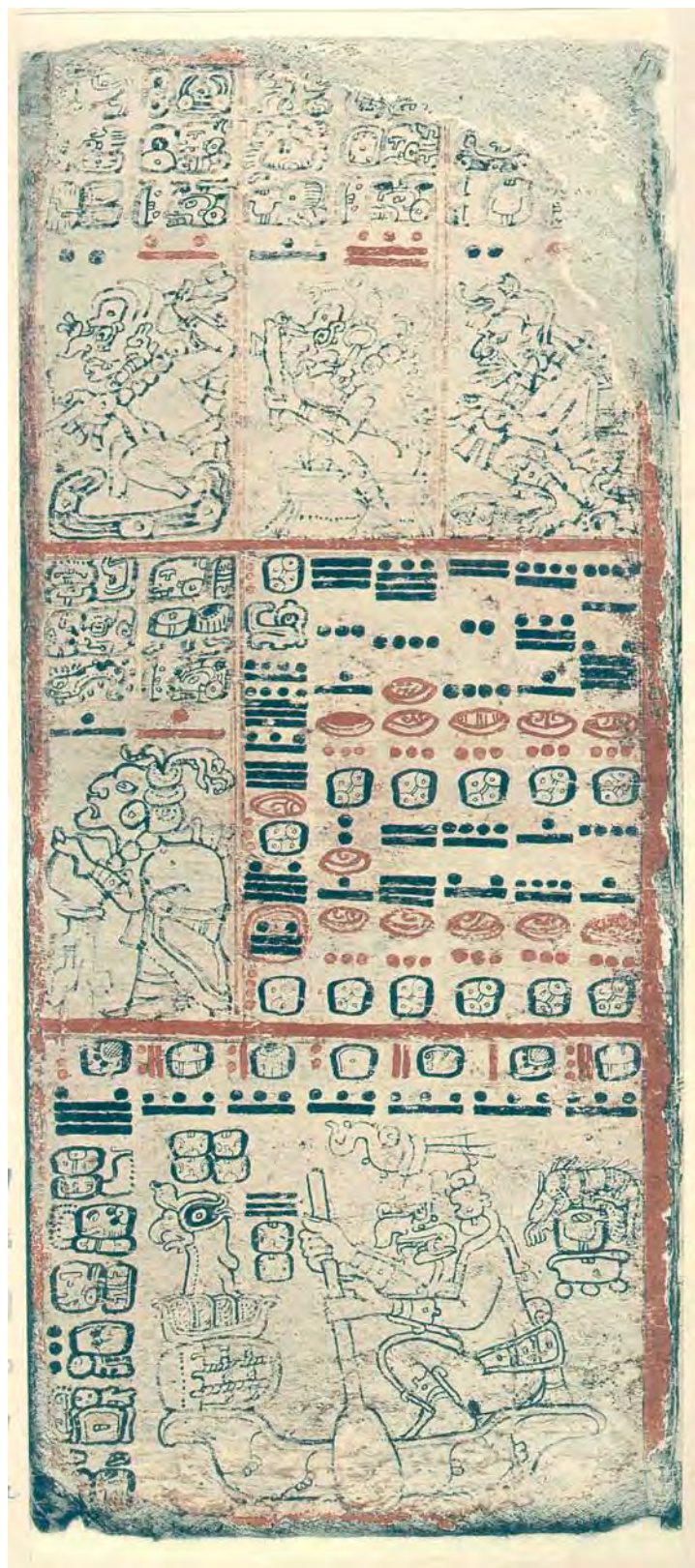


Figure III.99: Dresden Codex page 43 (after Förstemann 1880 photo courtesy of FAMSI).



Figure III.100: Dresden Codex page 45 (after Förstemann 1880 photo courtesy of FAMSI).

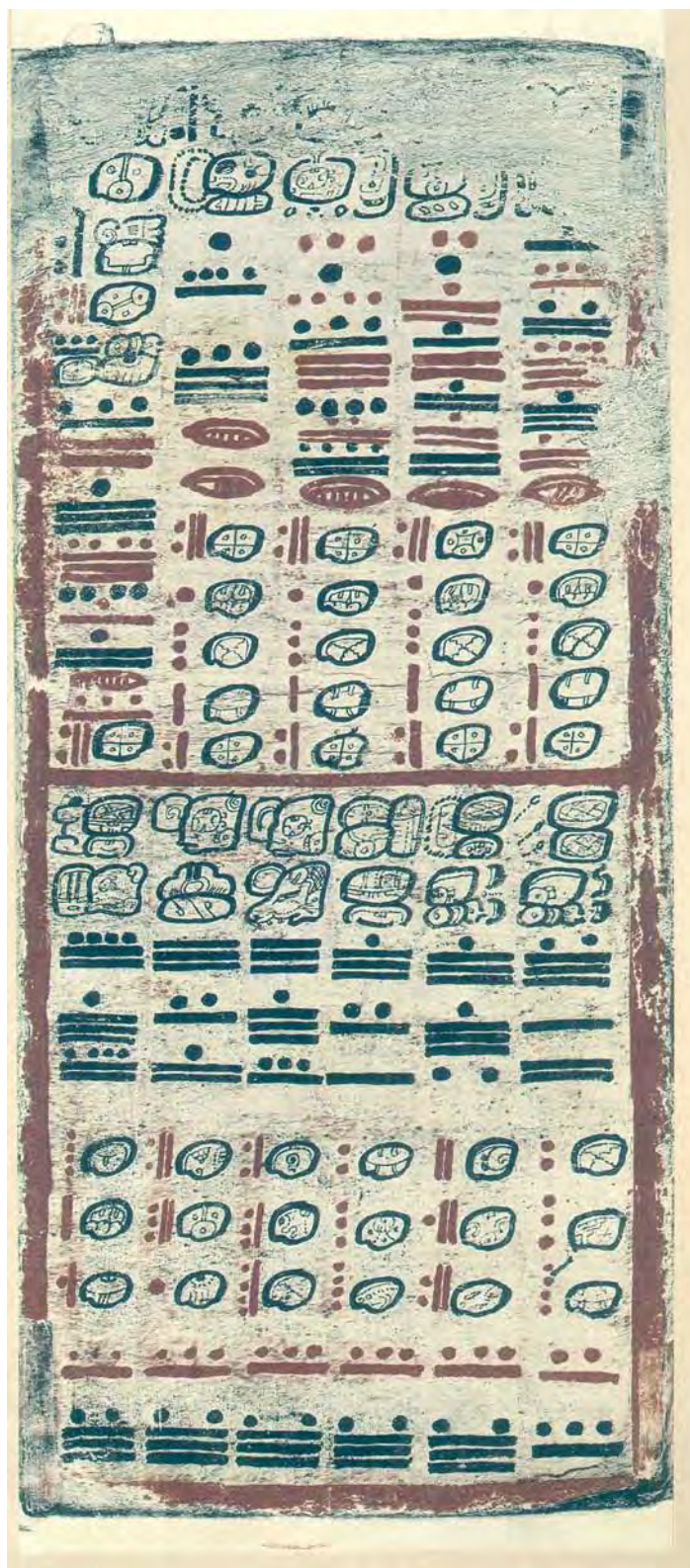


Figure III.101: Dresden Codex page 51 (after Förstemann 1880 photo courtesy of FAMSI).

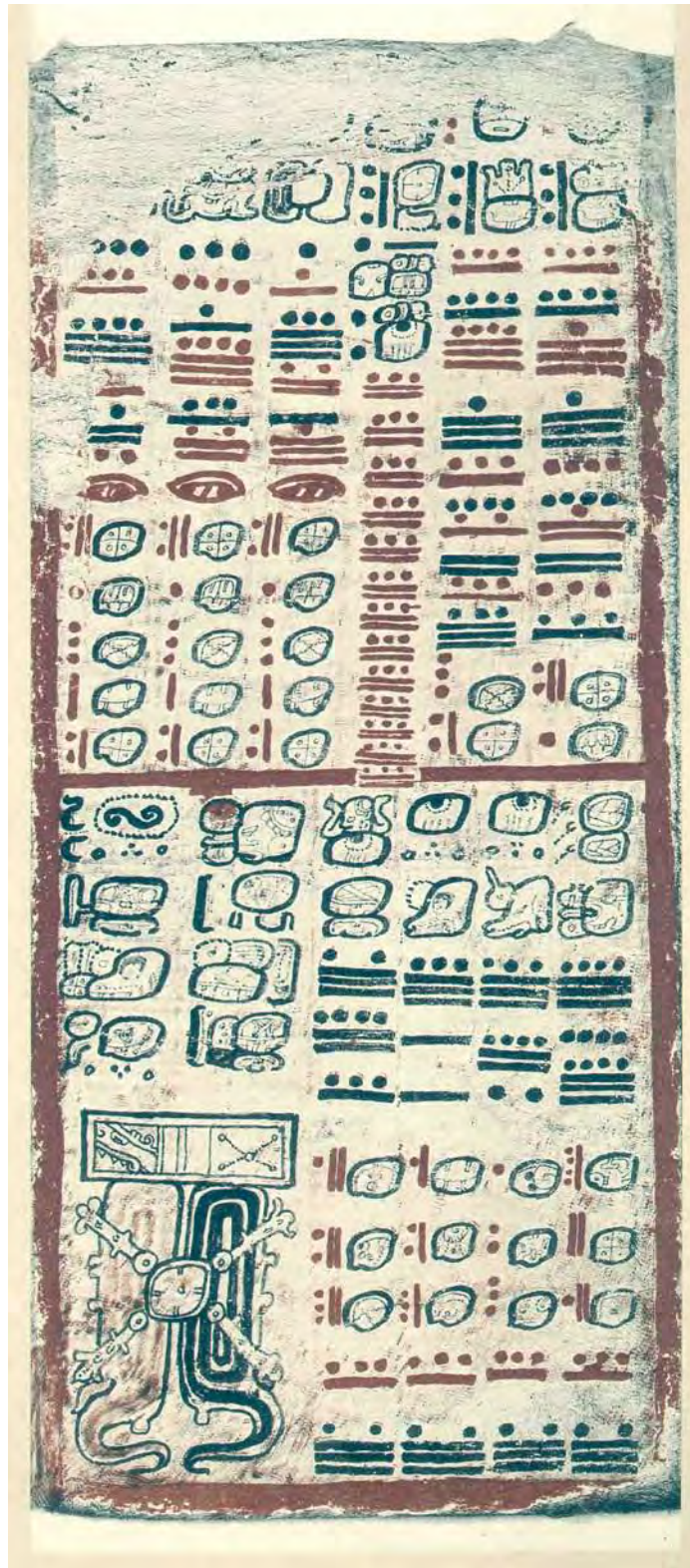


Figure III.102: Dresden Codex page 52 (after Förstemann 1880 photo courtesy of FAMSI).

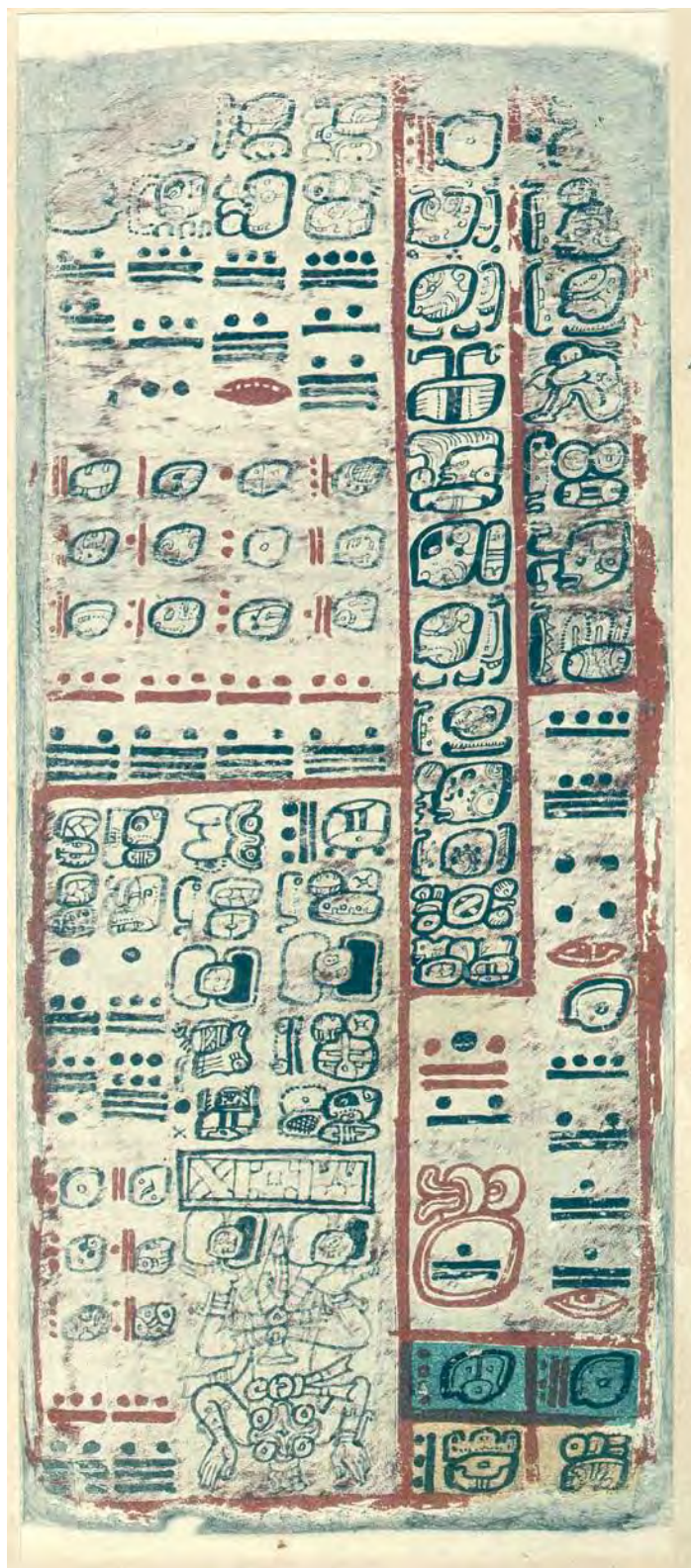
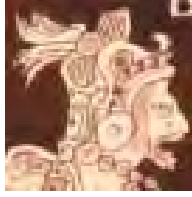


Figure III.103: Dresden Codex page 58 (after Förstemann 1880 photo courtesy of FAMSI).

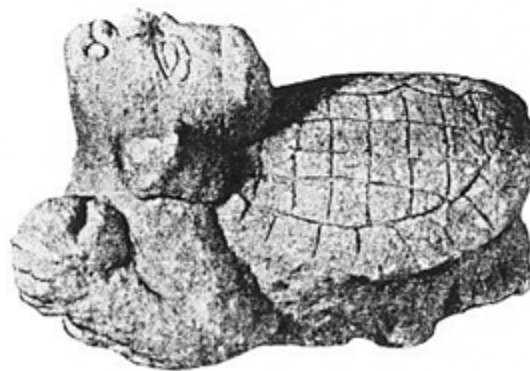


Figure III.104: Dresden Codex page 60 (after Förstemann 1880 photo courtesy of FAMSI).



a

Photograph © Justin Kerr



b

Figure III.105a: Head of God N Dresden Codex Page 60 (after Kingsborough 1831-1848, Photograph © Justin Kerr); Figure III.105b: God N turtle figurines from Mayapan (after Pollack et al. 1962 fig 1 and 2).

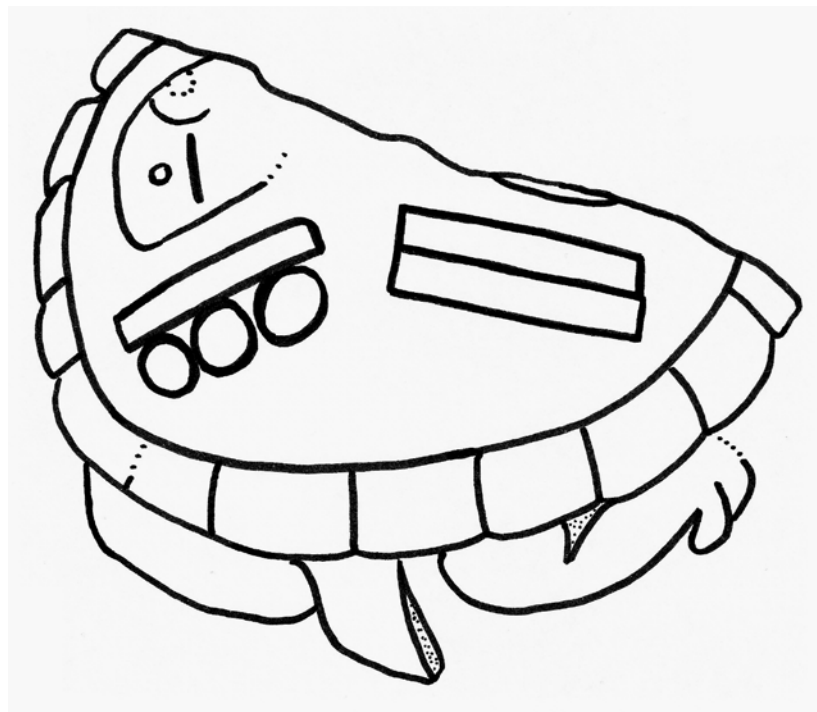
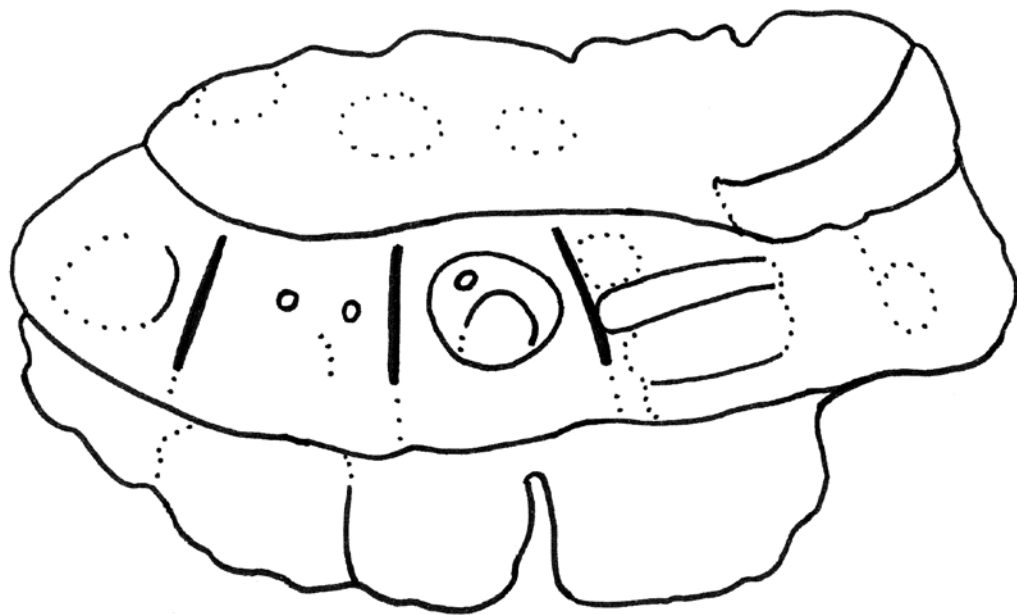


Figure III.106a: God N turtle figurine from Mayapan (drawing by Carl Callaway); Figure III.106b: God N turtle figurine from Mayapan (drawing by Carl Callaway)



Figure III.107: Dresden Codex page 61 (after Förstemann 1880 photo courtesy of FAMSI).

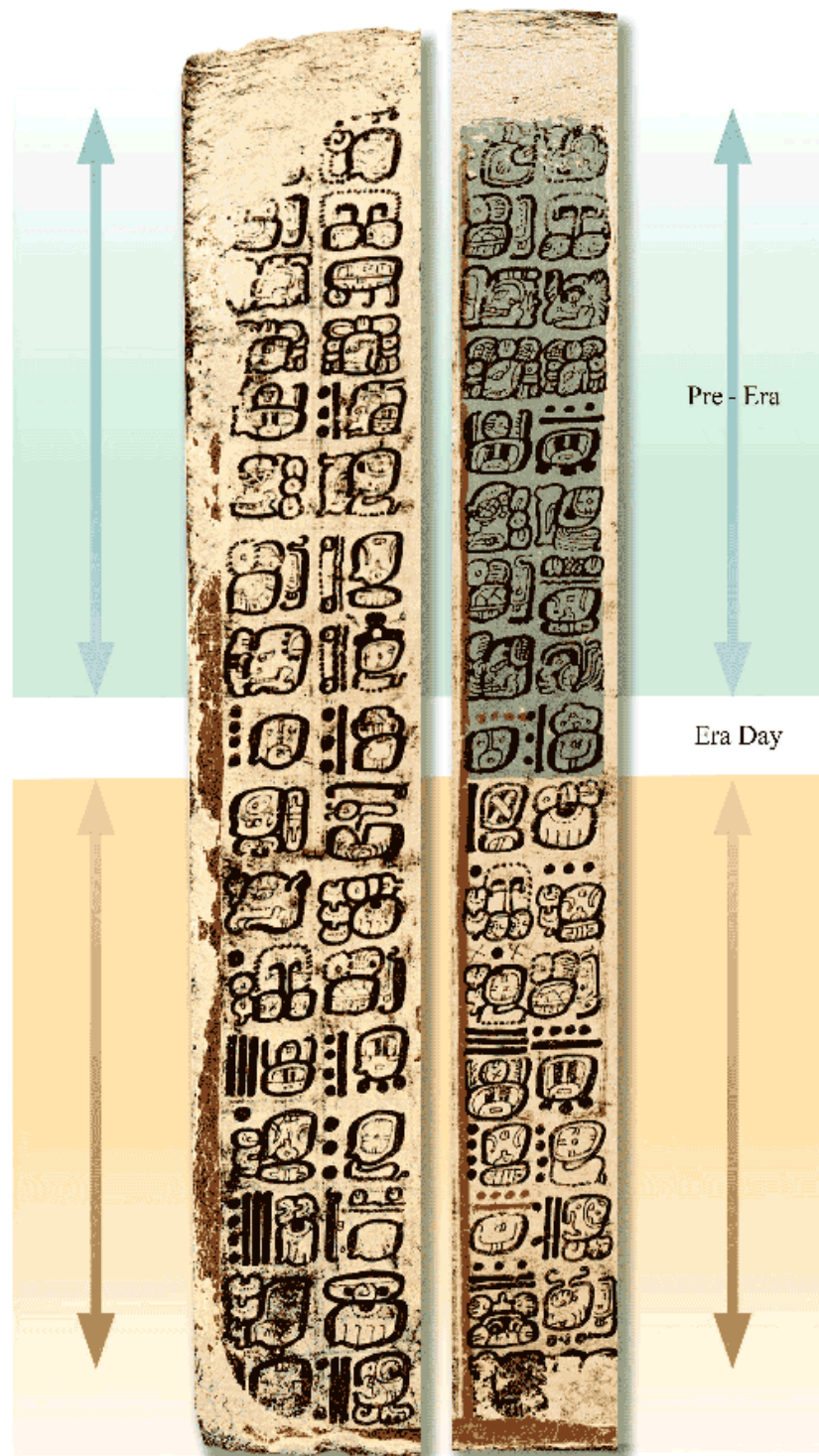


Figure III.108: Comparison of Dresden Codex page 61, Column A-B with page 69, Column C-D (photos of columns after Förstemann 1880 courtesy of FAMSI; photo montage by Paul Johnson).



Figure III.109: Comparison of Dresden Codex page 61 (A8-B10) with page 69 (C8-D10) (photos of columns after Förstemann 1880 courtesy of FAMSI; photo montage by Paul Johnson).



Figure III.110: Dresden Codex page 62 (after Förstemann 1880 photo courtesy of FAMSI).

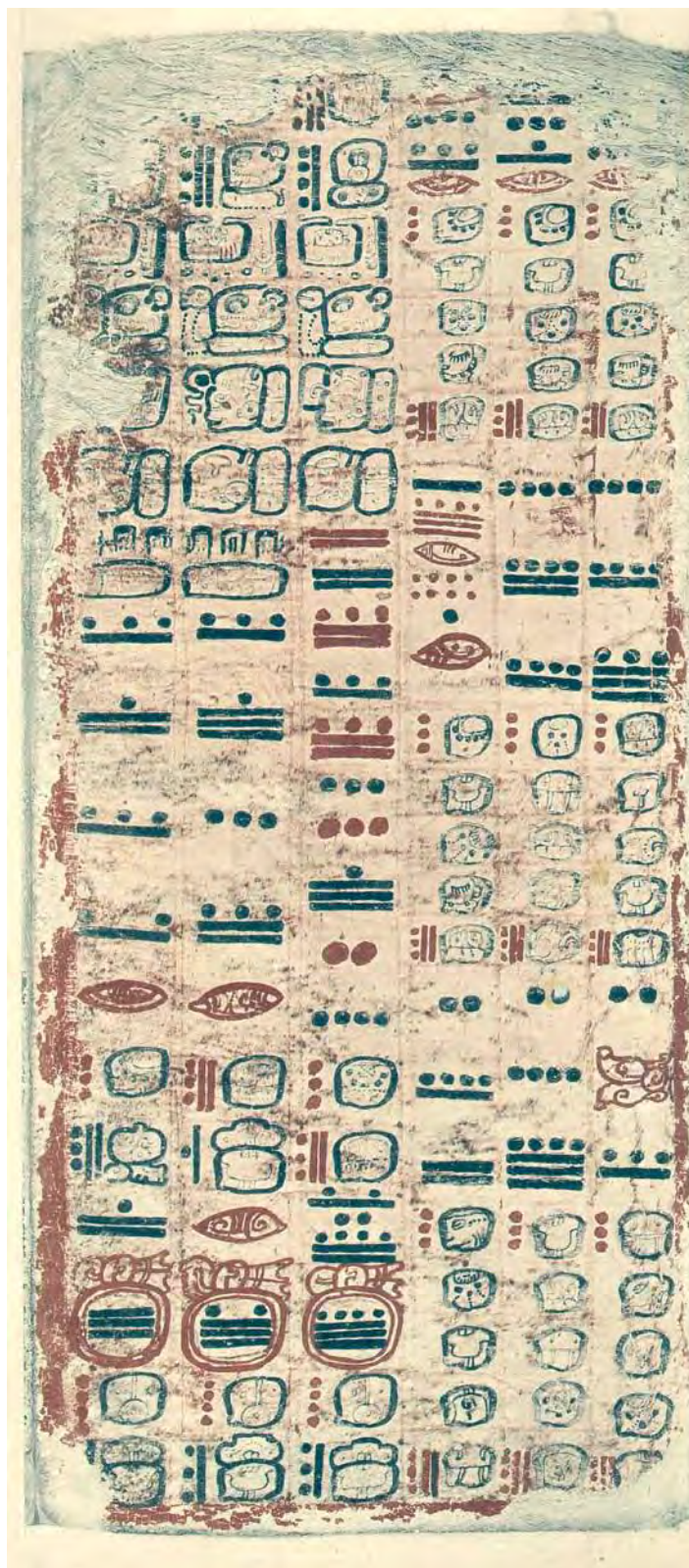


Figure III.111: Dresden Codex page 63 (after Förstemann 1880 photo courtesy of FAMSI).

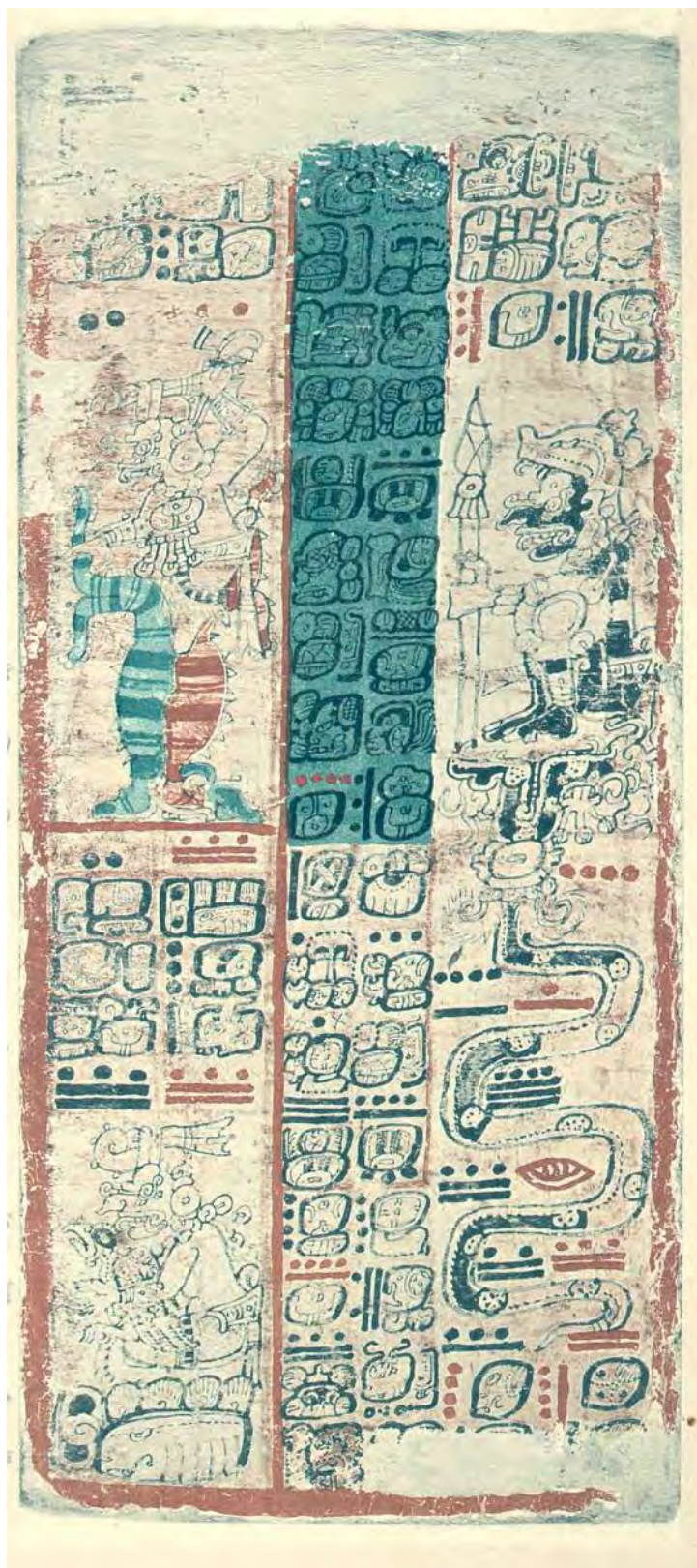


Figure III.112: Dresden Codex page 69 (after Förstemann 1880 photo courtesy of FAMSI).

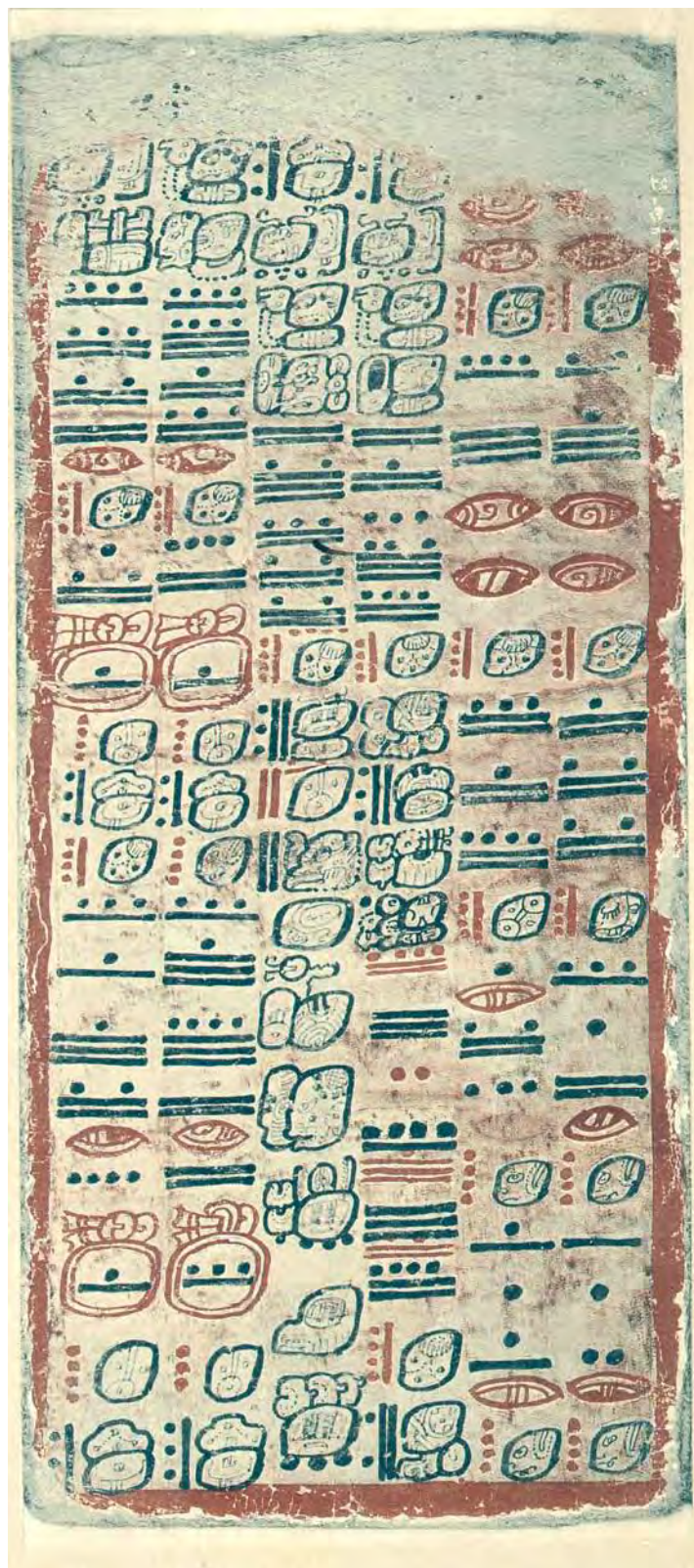


Figure III.113: Dresden Codex page 70 (after Förstemann 1880 photo courtesy of FAMSI).

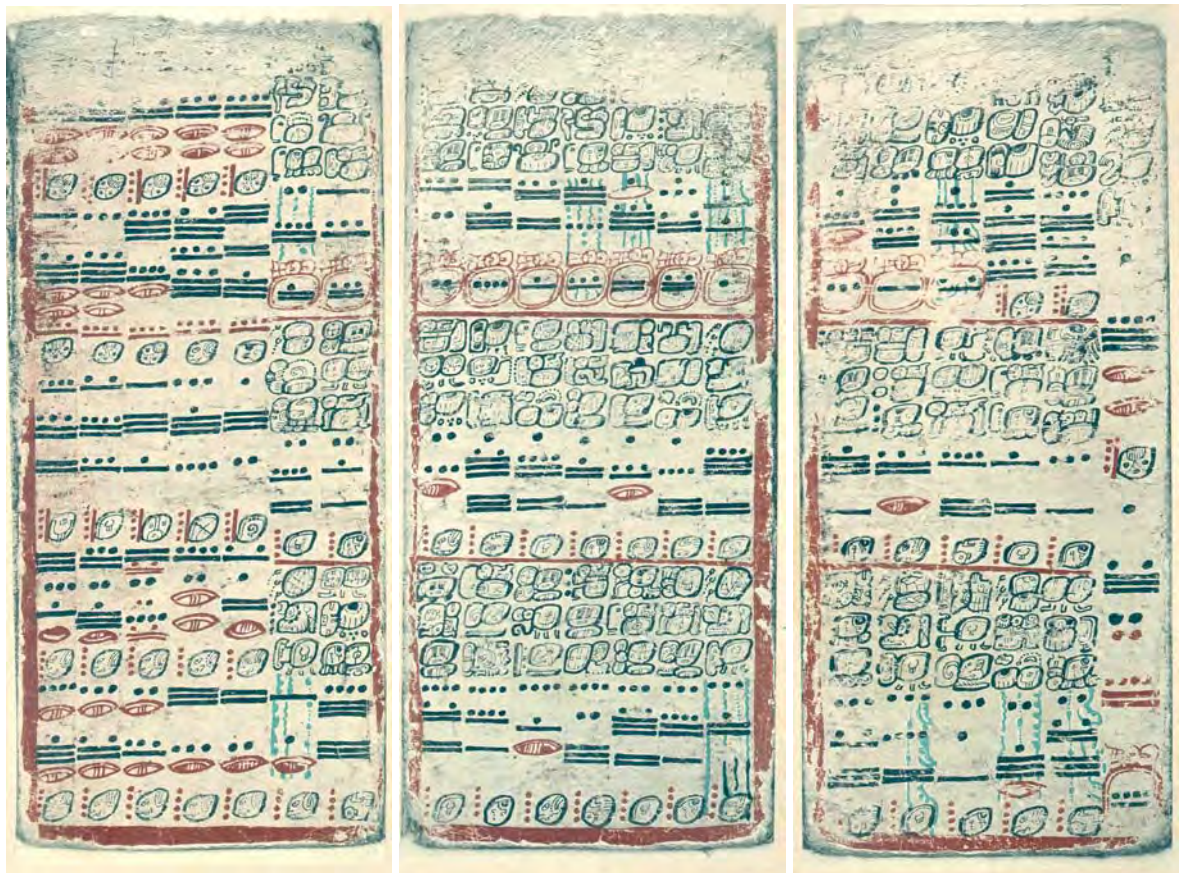


Figure III.114: Dresden Codex pages 71-73 (after Förstemann 1880 photo courtesy of FAMSI).



Figure III.115: Madrid Codex, page 19 (photo courtesy of FAMSI).

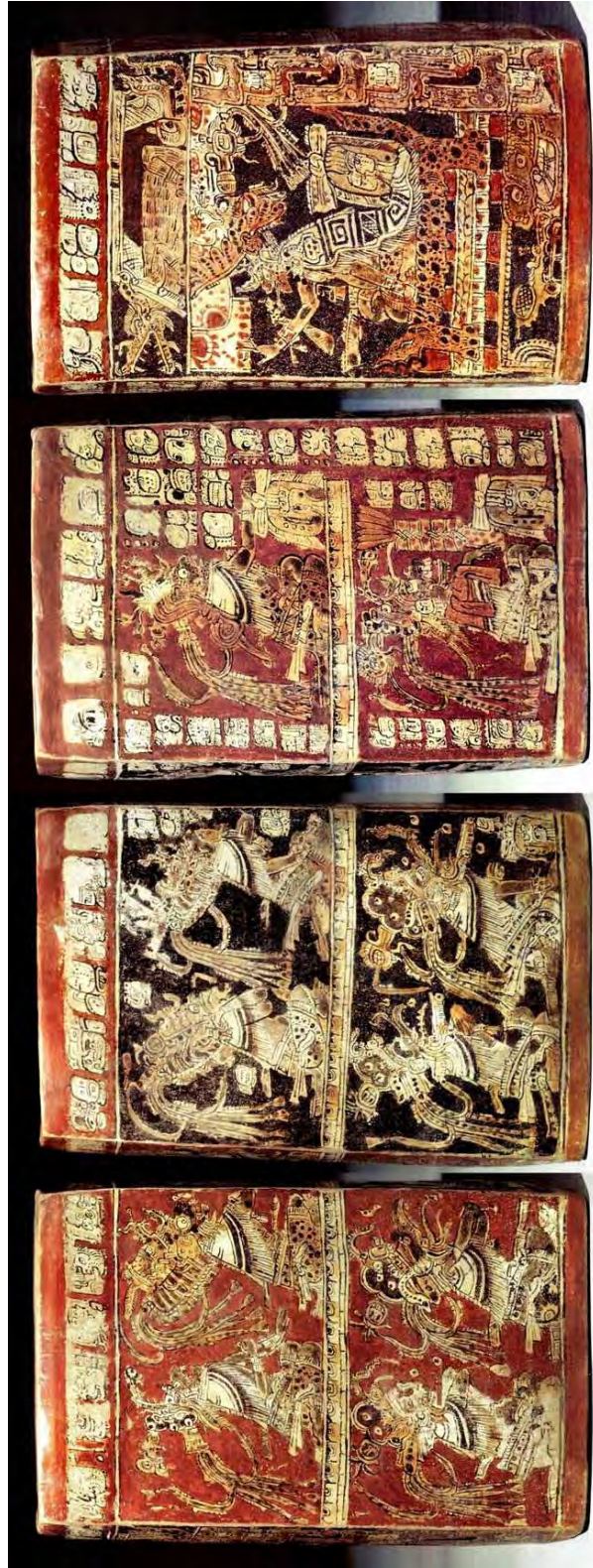


Photograph © Justin Kerr K2796

Figure IV.1: Vase of the Seven Gods (K2796) (Photograph © Justin Kerr K2796).



Figure IV.2: Pre-restoration photo of the Vase of the Seven Gods (K2796) (after Coe 1973:106-109).



Photograph © Justin Kerr K7750_1-4

Figure IV.3: Vase of the Eleven Gods (K7750_1-4) (Photograph © Justin Kerr K7750).



Photograph © Justin Kerr File no. K7750_1

Figure IV.4: Vase of the Eleven Gods (K7750), Side I (Photograph © Justin Kerr K7750_1).



Photograph © Justin Kerr File no. K7750_2

Figure IV.5: Vase of the Eleven Gods (K7750), Side II (Photograph © Justin Kerr K7750_2).



Photograph © Justin Kerr File no. K7750_3

Figure IV.6: Vase of the Eleven Gods (K7750), Side III (Photograph © Justin Kerr K7750_3).



Photograph © Justin Kerr File no. K7750_4

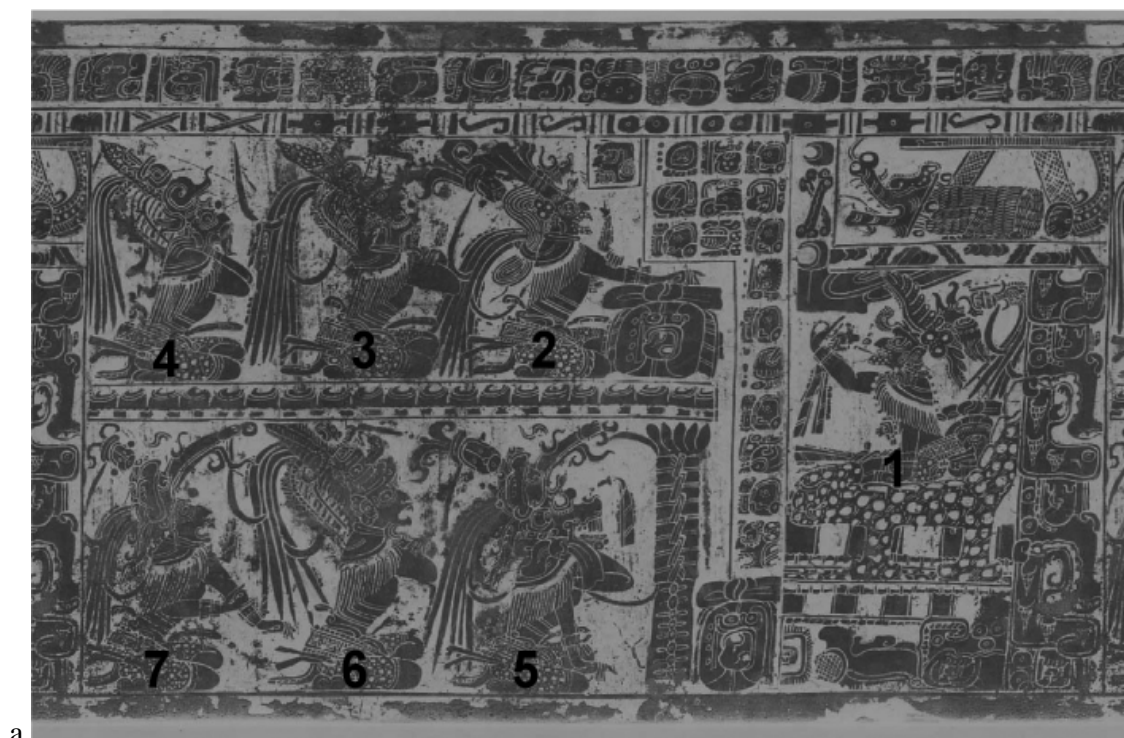
Figure IV.7: Vase of the Eleven Gods (K7750), Side IV (Photograph © Justin Kerr K7750_4).



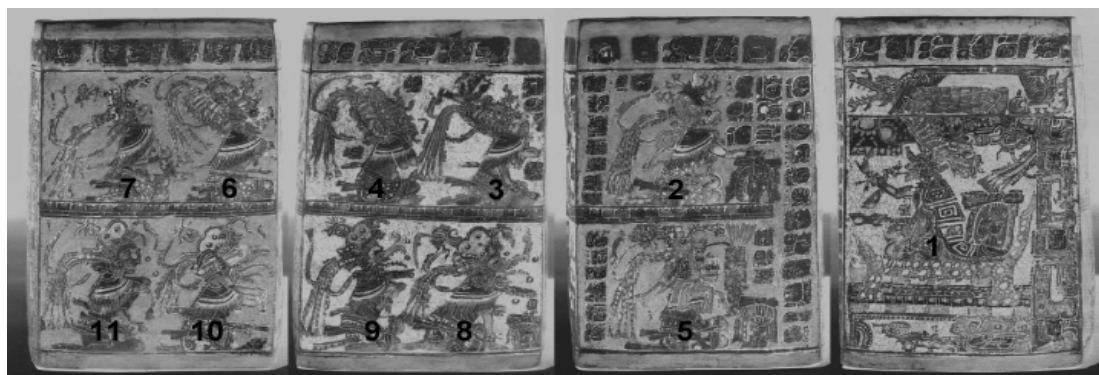
Photographs © Justin Kerr K7750_1-4



Figure IV.8: Vase of the Eleven Gods (K7750), rim text and secondary text (Photographs © Justin Kerr K7750_1-4 with photo montage by Carl Callaway).



a



b

Figure IV.9: God counts on (a) K2796 and (b) K7750 (original photographs © Justin Kerr K2796 and K7750_1-4 with digital alterations and numbering by Carl Callaway).

Photographs © Justin Kerr K2796 and K7750

K2796

K7750



Figure IV.10: Comparison of secondary texts accompanying each scene on K2796 and K7750 (original Photographs © Justin Kerr K2796 and K7750 with alterations made by Carl Callaway).

The 35th
TZ'AK B UL



a



b

Figure IV.11a: The *tz'akbul* Title from Naranjo Alt 1 (original drawing by Ian Graham with alterations by Carl Callaway); Figure IV. 11b: Tonina Ball Court Panel (photo by Carl Callaway).

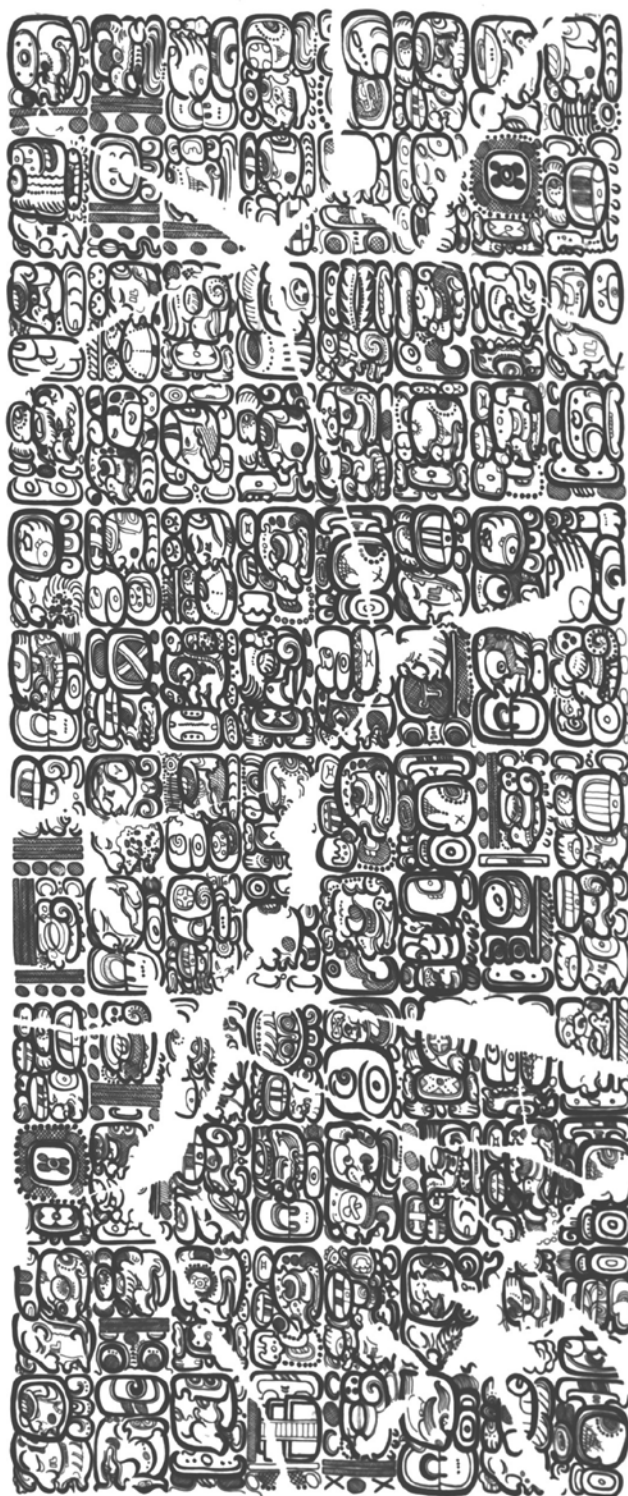
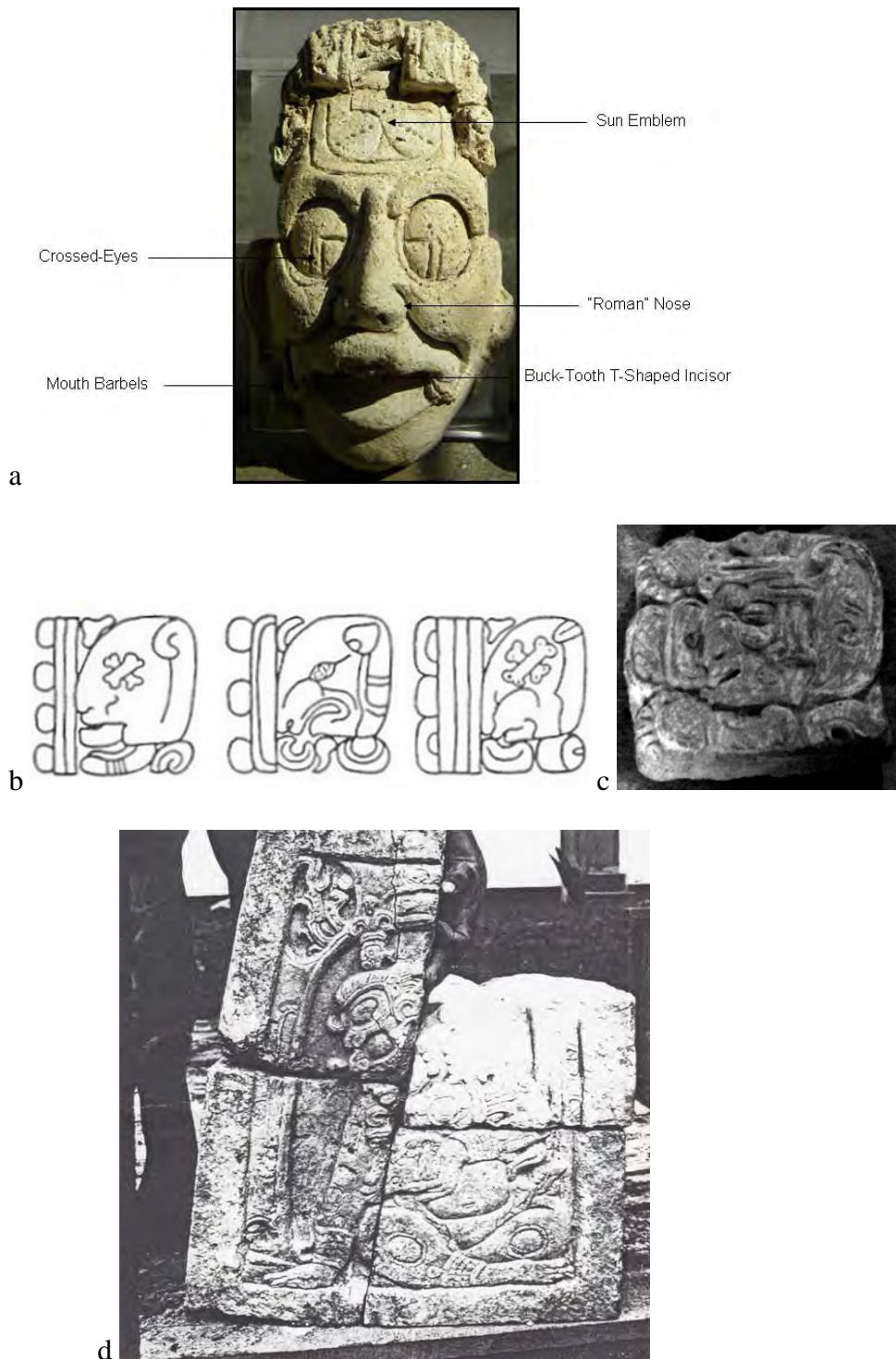


Figure IV.12: Palenque Tablet of the 96 Glyphs (drawing by Linda Schele courtesy of David Schele and FAMSI).



Photograph © Justin Kerr K635

Figure IV.13: Kerr Vase K635 (Photograph © Justin Kerr K635).



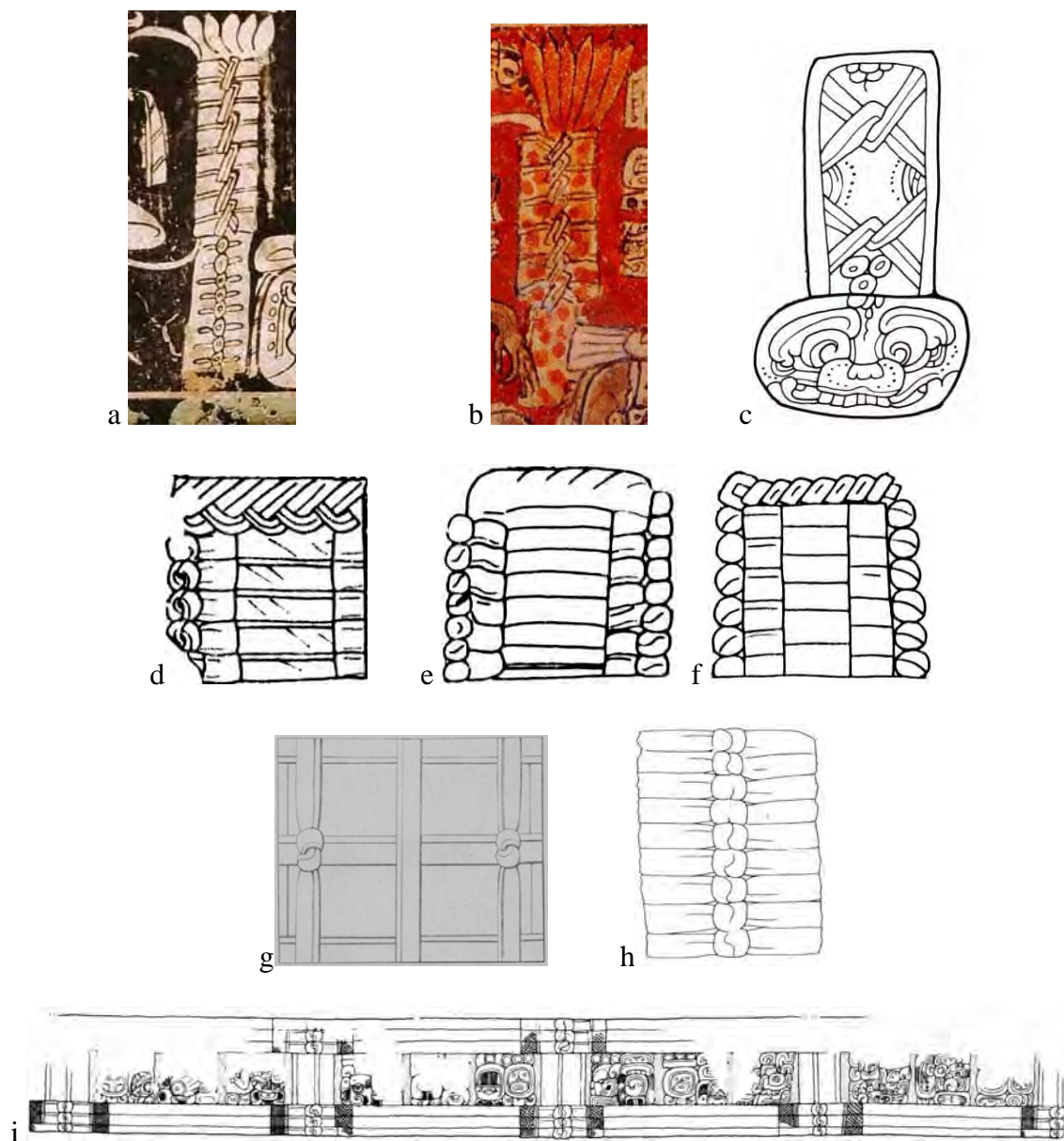


Figure IV.15a-i: Wrapped Stela and Altars; (a) bound stela from K2796 (Photograph © Justin Kerr K2796); (b) bound stela from K7750 (Photograph © Justin Kerr K7750); (c) bound stela from inscribed Copan peccary skull (drawing by unknown artist); (d) bound altar from Yaxchilan Stela 1 (drawing by Ian Graham); (e) bound altar from Yaxchilan Stela 4 (drawing by Ian Graham); Figure (f) bound altar from Yaxchilan Stela 6 (drawing by Ian Graham); (g) bound Copan altar 44 (drawing by Annie Hunter); (h) bound Copan Altar F' (drawing by unknown artist); (i) bound Copan Altar to Stela I (drawing by Mark Van Stone).

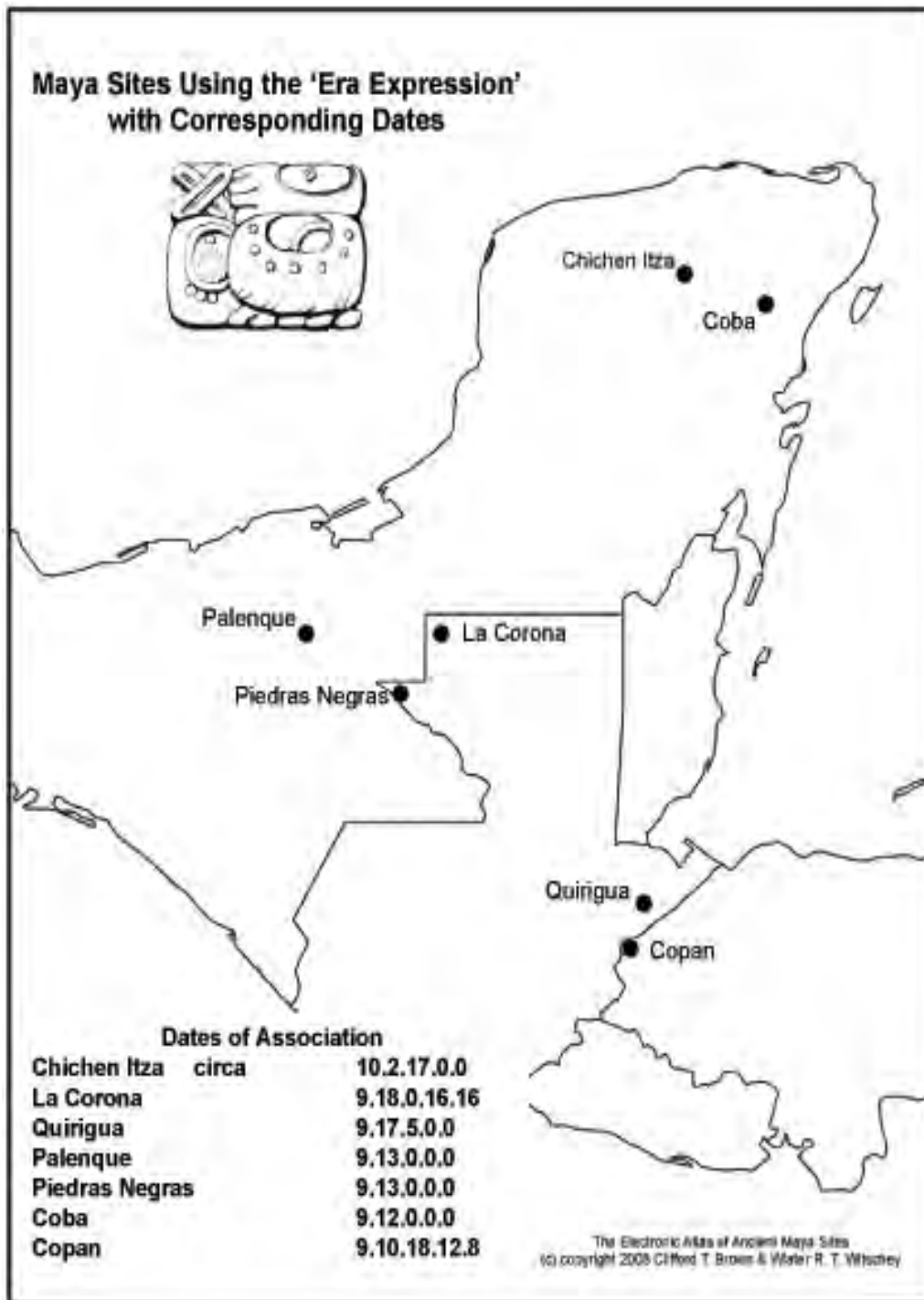


Figure V.1: Map of Maya sites using the common *jel k'ojob* “era expression” (general map provided by C.T. Brown and W. R. T. Witschey with additions made by Carl Callaway).

